REPORT RESUMES

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OCCUPATIONAL OPPORTUNITIES AND TRAINING NEEDS FOR NONFARM AGRICULTURAL JOBS IN THE METROPOLITAN AREAS OF LOUISIANA.

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A SURVEY OF 1,067 BUSINESSES OR AGENCIES HANDLING FARM PRODUCTS OR PROVIDING AGRICULTURAL SERVICE IN SEVEN METROPOLITAN AREAS IDENTIFIED PRESENT AND EMERGING AGRICULTURAL OCCUPATIONS OTHER THAN FARMING AND RANCHING FOR WHICH INSTRUCTION IN VOCATIONAL AGRICULTURE SHOULD BE MADE AVAILABLE. DATA PROVIDED EMPLOYEE INFORMATION FOR SELECTED OCCUPATIONAL FAMILIES--(1) FARM MACHINERY, SALES AND SERVICE, (2) FARM SUPPLIES AND EQUIPMENT, (3) LIVESTOCK AND POULTRY, (4) CROPS, FORESTRY, AND SOIL CONSERVATION, (5) ORNAMENTAL HORTICULTURE, (6) WILDLIFE AND RECREATION, (7) FARM SERVICES, AND (8) AGRICULTURAL SERVICES. FOR EACH OCCUPATIONAL FAMILY, DESCRIPTIONS AND JOB TITLES AT THE DIFFERENT LEVELS, AND EMPLOYEE BACKGROUND AND EDUCATIONAL REQUIREMENTS ARE INCLUDED. AGRICULTURE IN THE SURVEY AREAS IS A GROWING SEGMENT OF THE ECONOMY. OF THE 30,300 EMPLOYEES IN THE BUSINESSES SURVEYED, 9,087 NEEDED KNOWLEDGE OR SKILL IN AGRICULTURAL SUBJECTS. THE GREATEST NUMBER OF WORKERS WAS IN (1) OCCUPATIONS DEALING WITH CROPS AND SOIL CONSERVATION, AGRICULTURAL SERVICES, LIVESTOCK AND POULTRY, AND FARM SUPPLIES AND EQUIPMENT, AND IN THE (2) MANAGEMENT, SEMISKILLED, UNSKILLED, AND SALES LEVELS. GENERALLY, WORKERS WERE EXPECTED TO HAVE A HIGH SCHOOL EDUCATION AND SOME POST-HIGH SCHOOL TRAINING. ONE OF FOUR PROSPECTIVE EMPLOYEES WAS EXPECTED TO HAVE A COLLEGE DEGREE. TO ACHIEVE ITS FULL POTENTIAL IN LOUISIANA EDUCATION, VOCATIONAL AGRICULTURE MUST (1) CHANGE ITS BASIC PURPOSE TO TRAIN FOR EMPLOYMENT IN THE TOTAL INDUSTRY, (2) EXTEND THE TRAINING TO MORE PEOPLE AND GEAR IT TO THE LABOR MARKET, (3) BASE THE TRAINING UPON THE AGRICULTURAL SCIENCE, MAKE IT A PART OF THE TOTAL SCHOOL PROGRAM, AND INCLUDE WORK EXPERIENCES AND A REVIEW OF THE WORK WORLD, AND (4) EXTEND THE TRAINING TO COMPREHENSIVE HIGH SCHOOLS AND AREA VOCATIONAL SCHOOLS. THE SURVEY INSTRUMENT AND A LIST OF JOB TITLES ARE INCLUDED. (BS)

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OCCUPATIONAL OPPORTUNITIES AND TRAINING NEEDS FOR NONFARM AGRICULTURAL JOBS IN THE METROPOLITAN AREAS OF LOUISIANA

SHREVEPORT
MONROE—WEST MONROE
ALEXANDRIA—PINEVILLE
BATON ROUGE
LAKE CHARLES
LAFAYETTE
NEW ORLEANS

1,067 Agri—Businesses

30,300 Employees

9,087 Workers with
Agri. Competencies

1,582 Job Titles

VO. AG. ED. NO. 6
FEBRUARY, 1965

Department of Vocational Agricultural Education
School of Vocational Education
College of Agriculture
Louisiana State University
Baton Rouge

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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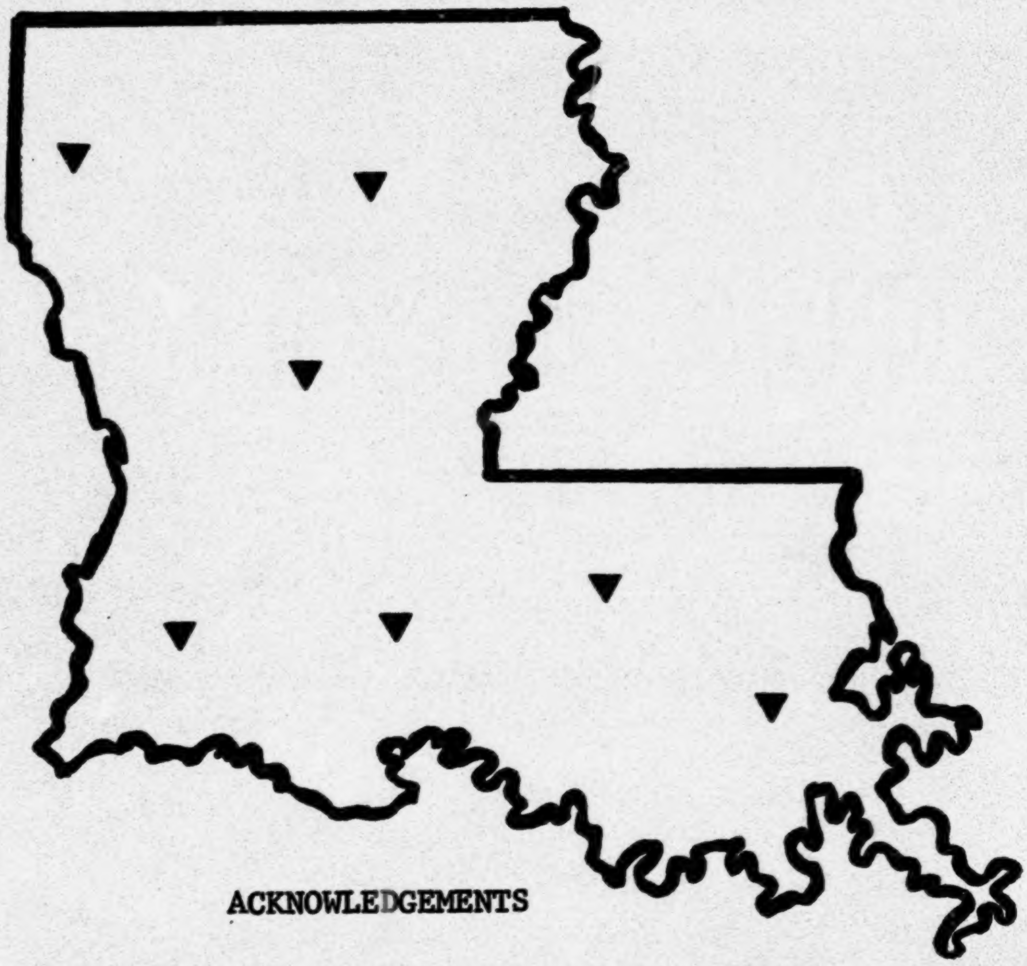
February, 1965

PREFACE

The turn of the Century quickened the pace of changes occurring on the farm, each leading to greater and more efficient production--a division of labor has imperceptibly emerged, with only production remaining: processing, marketing and supplying have moved to town, taking shape in the form of enterprises designed to supplement farming and better serve the consuming public. The shifting of so large a portion of agriculture from farm to city greatly influences occupational opportunities open to youth, reducing those available on the farm and increasing the range of opportunities available in cities, while in both instances qualifications required of workers have continued to spiral upward, making it increasingly difficult for educational processes to keep in step. The import of this Report lies in lending perspective to educators who face the challenging task of providing training programs interwoven with the ever changing requirements of agriculture.



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Grateful acknowledgement is also made to the persons who served as Interviewers, and to the Management of the 1,067 businesses and agencies included in the research.

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OCCUPATIONAL OPPORTUNITIES AND TRAINING NEEDS FOR NONFARM AGRICULTURAL JOBS IN THE METROPOLITAN AREAS OF LOUISIANA

C. L. Mondart, Sr.*
C. M. Curtis**

INTRODUCTION

Louisiana's rural high schools have a tremendous responsibility in providing programs designed to prepare farm and rural nonfarm boys for work, a task made more difficult by the lack of job opportunities in rural areas in comparison to those available in the urban centers where business and industrial growth is being experienced.

Youth, not able to find work at home or in the community, must migrate to wherever job opportunities beckon, for they will live in a society where people hold a job to be a "badge" of citizenship, and it is by means of a job that most of them can hope to achieve social and economic satisfaction--hence, their biggest single task in life is qualifying for, landing and holding a job.

Until this time, pre-employment training for rural youth in high school has been limited almost entirely to vocational agriculture, a program designed by law and later by tradition to prepare present and prospective farmers for proficiency in farming occupations; consequently, the lack of diversity, flexibility and adaptability of the program has created a "disaster gap", being the opening between what students are taught and what is needed to exploit the full potential of agriculture as a source of occupational opportunities. If this gap can be closed,

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rural boys will have an opportunity to make full use of their training and experiences.

Passage of the National Vocational Education Act in December, 1963, focused attention upon the declining opportunities to own and operate a farm--that more boys will enroll in vocational agriculture than can possibly farm, largely because of farm consolidation, increasing capital requirements, and continuing technical advancements that further reduce the need for manpower.

It is now a matter of grave concern that vocational agriculture programs are not preparing rural boys for enough different kinds of jobs that are known to exist in the broad complex of agriculture, requiring knowledge and skill in agricultural subjects.

Influence of Farm Changes on Occupational Opportunities

Few people understand the complexity of agriculture and appreciate the scope of occupational opportunities it offers to youth--it is big business, second to none, and to satisfy all of the people who seek its services daily, it must bring together a great complexity of knowledge and skill in agricultural subjects, supported by an animated structure of resources without equal anywhere.

Today, the most common question posed by those interested in agricultural education is, "Where are the jobs in agriculture: how numerous are they, and what qualifications are required for entry?" The question not only comes up when teachers meet to consider their problems, it also arises when leaders in agricultural education propose changes in vocational agriculture.

There is no easy answer, but a reasonable approach to the problem lies in research of a kind that will yield sufficient information needed to guide those concerned with rural youth to a full understanding and appreciation of the circumstances involved, with a view to finding answers.

The first step is to clear misconceptions as to what the term "agriculture" means and implies--the terms "agriculture" and "farming" are not synonymous. Farming is only one phase of agriculture; it is the basic segment, with processing, marketing, and service occupations growing out of it--agriculture is much broader and more inclusive than farming. Agriculture is not, therefore, a single occupation, rather it is made up of sectors of occupations defined as production, marketing, processing and services: farming now is "production" agriculture. It, too, is made up of a number of occupations, each requiring specific skills and abilities.

These newer concepts and definitions owe their origin to the dramatic changes occurring in agriculture, causing the farm to no longer represent total occupational opportunities available to rural youth.

Tracing these changes to the turn of the century brings the picture into better focus. Then Louisiana had a population of 1,381,000 of which 73 per cent were classified as rural. Sixty years later, urban population had doubled, but those in rural areas had decreased to 43 per cent of the total population, 3,381,000. During the same period, the seven metropolitan areas of the State grew to contain over 50 per cent of the total population.

Farms supplied much of the population assembled in urban areas, as the growth of technology and automation reduced numbers of workers required in the fields, while industrialization in urban centers provided an increasing number and variety of job opportunities, causing farming to gradually give way as a major source of employment. In 1960, only 3.4 per cent of the State's workers were farmers; only three per cent were farm laborers, making both categories lower for the State than for the Nation. Machines took over the work once performed by human hands--the fewer hands

left maintained and even increased production.

These emerging conditions were but reflections of the structural changes in the State's culture, yet in the process of "improvement by change" certain highly significant developments were experienced without fanfare or understanding. Farming "lost face", even though farm efficiency directly resulted in the release of great numbers of workers to enter industrial employment, actually making possible the rapid growth of industry in the State, a contribution not generally acknowledged.

The influence of the farm upon continued progress is almost without limitation--it has long dominated cultural as well as economic development. It has been a way of life, standing firm as a symbol of freedom; and, until the '20's, it provided work for over one-half of the State's workers: then, along with the coming of an over abundance of food and fiber, plus industrialization, its workers started departing in increasing numbers, leaving behind a way of life for fewer people who require less help to produce more.

Unhappily, this highly progressive movement has been interpreted to mean a decline in agriculture; subsequently, teachers and parents have acted to cause rural youth to look outside of agriculture for employment opportunities, when actually farming is and will continue as a vital and growing segment of the economy. Without the farmer and his counterpart in cities who process his production and service his needs, progress would come to an abrupt halt and shrivel to nothing within a matter of days. Changes experienced on the farm merely reflect applications of scientific research and wide use of modern production methods that increase yields with fewer workers.

Influence of Urban Agriculture on Occupational Opportunities

An allied development equally significant but even less well under-

stood is the commercial status of today's farmer--he is a specialist who is concerned primarily with the production of crops and livestock. Unlike earlier farmers, he does not operate a self-contained unit, nor does he attempt to store, process and market his produce. These processes have moved to "town" where they have taken shape in the form of other sectors of agriculture: handling farm production from farm to consumer, and supplying the production needs of the farmer.

These urban enterprises have also grown highly specialized, complementing but still dependent upon the farm, just as modern day farmers can not function without them. Combined, they comprise today's modern version of agriculture, called "agri-business".

Those in a position to advise with rural youth tend to "short change" them if they look to agriculture for occupational opportunities without taking into account opportunities offered by sectors of agriculture located in urban areas; in fact, workers there out-number those on the farm, for as a worker leaves the farm, nonfarm agricultural enterprises add one or more workers, a nation-wide phenomenon.

Contrary to general belief, the combined sectors of agriculture offer a major source of occupational opportunities to youth, especially to farm boys who have a background of experience and training requisite to farming and many jobs in nonfarm agricultural facets. Unluckily, there is a dirth of information available to educators describing job opportunities in agriculture, particularly those in nonfarm sectors; as a consequence, former students of vocational agriculture do not hold these jobs in significant numbers--studies made over the period 1918 to 1960 show only eight per cent of graduates employed in sectors of nonfarm agriculture, a condition traceable to narrow training programs, resulting in agriculturally experienced and trained boys competing for non-agricultural jobs with their city cousins who are more competitively trained.

Need For Expanded Programs in Vocational Agriculture

Before rural youth can be placed in a position where they can benefit fully from their experiences and training, full recognition must be given to the need for persons trained to process and distribute agricultural production, serve the production needs of farmers and conduct research and teaching programs designed to further advance all agricultural processes.

Figures showing Louisiana's educators problems peculiar to farm youth when choosing an occupation can be reduced to fairly simple terms: between 1960 and 1970 there will be an average of 12,382 farm boys available for work annually,[1] 17 per cent, or 2,200 can find successful farming opportunities, while 10,382 or 83 per cent, must look elsewhere to select an occupation.

For many of those who are without a desire to farm, or are unable to gather the resources farming requires, there are real and important job opportunities in urban enterprises where knowledge and skill in agricultural subjects are requisite to jobs dealing with processing and distributing farm products, plus those found in the manufacturing and distribution of farm equipment and supplies.

Figures relating to farm operators and numbers of workers employed on the farm are readily available from census reports; also they can be used to make determinations as to the numbers of "new faces" required annually to keep the farm production plant a successful operation; but, similar figures are not available covering workers in towns and cities employed by firms engaged in processing-distributing farm products and supplying farm production requirements. Determining the scope of such employment is made more difficult owing to the diversity of work performed, making it unnecessary for all workers to have a knowledge or skill in agricultural subjects, also, a distinction must be made between workers in enterprises dealing primarily with farm products and those handling derived products where no agricultural knowledge is necessarily involved.

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[1] Engle, Louisiana Agriculture, Agricultural Experiment Station, Louisiana State University and Agricultural and Mechanical College, Vol. 6, No. 4, 1963.

An estimate[2] of Louisiana's agricultural labor force as an occupational rather than an economic category made in 1963 and based upon 1959 Census is indicative of its scope: a total of 114,758 workers were found in the three primary sectors of agriculture: supplying, farming, and processing-distribution. These three categories accounted for ten per cent of the State's workers: 61,647 farming, 4,864 supplying and 48,247 in processing-distribution.

These figures show conclusively that agriculture in Louisiana is much more than farming--that an agricultural education program limited to training for farming is no longer adequate to meet the training needs in this field.

Planning Broader Training Programs in Vocational Agriculture

The Vocational Education Act of 1963, provides the stimulus for a broad approach in vocational agriculture, of dimensions that will give youth training for occupations involving knowledge and skill in agricultural subjects, whether or not the occupation involves work on the farm.

Soon leadership in vocational education will be tested as the forces interested in rural youth merge to open the whole catalogue of agricultural occupations with a view to providing resources so urgently needed to prepare more boys for work they are best qualified by experience to pursue. Vocational education is the youths' gateway to opportunity, only if it stresses and adapts them to the world in which they live. All job requisites continue to spiral upward, so it is with the job of leadership. The task of developing "live" programs of vocational agriculture can not be "farmed out"--it belongs to the high school. A way must be found to move vocational agriculture into a broader era of service to rural youth, a responsibility to those in position of leadership. Clearly, what training should be provided for the eight boys in ten who will leave the farm to choose an occupation constitutes a major problem for educational leadership.

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[2] Jones and Taylor, Louisiana's Human Resources, Part II, Agribusiness and the Labor Force, (Department of Rural Sociology and Agricultural Experiment Station) Louisiana State University, Bul. 562, 1963.

In 1961, acting on the assumption that all sectors of agriculture, both those on and off-the-farm, will supply satisfying careers to rural youth who desire employment oriented to rural life, appropriate steps were taken in Louisiana to develop a new type of training program, leading to a basic minimum program for statewide use, supplemented later with more specialized programs designed to effect job entry in a particular sector, according to individual or group interests.

The shifting nature of agriculture and therefore, agricultural education, made it necessary to establish certain priorities in the processes of developing a new program: first, recognition was made of the increasing amount of knowledge and skill required of successful farmers; that the increasing productivity, size, and complexity of farm units reduces prospective farmers to a relatively few select individuals; even though training programs of the future must continue to place many graduates directly into farming. Hence, top priority was given to stimulating agricultural instructors in high school to upgrade their instruction with a view of attaining "quality" classroom instruction, using subject matter materials of a depth and breadth associated with modern agriculture.

In retrospect, the building of a new program for use statewide was accomplished in conferences with all instructors in vocational agriculture over a two-year period: 1961-1963. In these conferences traditional practices and concepts were questioned and re-evaluated in the light of present and future circumstances, resulting in plans required to broaden future programs to dimensions considered feasible to provide pre-employment training to boys who could not farm but desired to continue work under the agricultural "umbrella".

The pattern for agricultural instruction emerging from this extensive effort, provides basic training units for developing knowledge and skill in four primary agricultural subject areas: crop production; animal production; management, marketing and conservation; mechanics and automation; and forestry was included for sections of the state where it is the principal farm business.

This program, now in the hands of all vocational agricultural teachers, is but the first accomplishment of a series of priorities making up the process of "tooling up" for a much more comprehensive instrument that will make vocational agriculture more meaningful, purposeful and useful to a larger percentage of rural youth.

Basic to further planning was a survey of employment potential including number of people employed in different occupations making up agriculture in areas to which graduates might go to seek employment, together with agricultural competencies considered requisite for effecting employment---on such information will depend occupations for which training will be offered.

Survey of Metropolitan Areas in Louisiana

The National Vocational Education Act of 1963, for the first time, provided funds for use in the preparation for any job demanding knowledge and skill in agricultural subjects, providing such training does not lead directly to a college degree. This provision is a radical departure from the "community" concept under which vocational agriculture has traditionally functioned--it calls for an expanding role on a scale never before realized, possible only if high quality occupational education research can be maintained to identify vocational opportunities and individual training needs.

Subsequent to the development of a "minimum" program for vocational agriculture in Louisiana, priority was given at the state level to action considered essential to implementing a research program of a scope that would yield sufficient information on which to base programs that would provide more adequate training opportunities to rural youth.

At the time, the problem of first magnitude was that of financing. In the absence of funds at the University and State Department of Education levels, a petition for funds to inaugurate a research program was directed to the State Board of Liquidation of the State Debt by the Louisiana Agricultural Teachers Association--a grant was obtained in November, 1963, amounting to $25,766.00, for use by the University to undertake an occupational survey of agricultural occupations, and occupations directly related to agriculture.

A determination was made as to how this grant could be most advantageously applied towards a survey of statewide dimensions, resulting in action to investigate first occupational opportunities in agriculture contained in the metropolitan areas of the State: Baton Rouge, Alexandria, Shreveport, Monroe, Lafayette, Lake Charles and New Orleans, since over 50 per cent of the population is found in these cities, or in suburbs adjacent to them. Second priority was assigned to the task of making a similar survey in the more rural centers of the state at a later date when time and funds are available.

Survey Purposes

The primary and sole purpose of making the survey was to obtain firsthand from each business or agency handling farm products, and/or providing farm and agricultural service, information describing each and every job found that requires performance involving a knowledge and skill in agricultural subjects, regardless of employment level.

Information considered essential to the study covered a wide spectrum of factual data relating to job opportunities and salary levels; kinds of positions and employment levels, together with competencies needed in agriculture according subject matter areas. The major aim and objectives of the research follow:

Aim: To identify present and emerging agricultural occupations other than farming and ranching for which instruction in vocational agriculture should be made available.

Objectives:.

1. To determine present numbers of workers in the different job titles according to occupational clusters (families) and levels of employment, and
2. To determine agricultural competencies needed for job entry and advancement by occupational clusters (families) and level of employment, and
3. To determine special job characteristics and requirements, such as age of entry, salaries or wages, formal education, farm experience, residential background, legal restriction and licensing, and a description of work to be done by employees holding job titles, and
4. To predict trends in occupational opportunities in Agriculture, other than in farming and ranching.

Survey Procedures

The population reached during the survey of the seven metropolitan areas included all businesses and agencies engaged in handling farm products and/or providing agricultural services, excluding those firms handling products that were derived from farm production, along with those having no employees with a need for agricultural competencies. These areas, located in all sections of the state, contained in 1960 a population approximating 1,700,000, equal to more than one half of the total population. Three of the areas are considered commercial: Alexandria, Monroe and Lafayette, the others are largely industrial by comparison; but all are centers for the processing and marketing of farm products, besides providing agricultural services.

It is towards these cities that rural youth in quest of a job so often direct themselves, under a tremendous handicap. It is difficult enough to find a job, but to hold it and advance will be even more difficult unless before leaving home they can obtain the education and training so essential to successfully "crashing" the big city.

Survey techniques were applied and "firmed up" in the Baton Rouge area, the first to be surveyed. The personal interview method was used to obtain employee information from all establishments, applying a schedule* developed at the National Center for Vocational Agriculture at Ohio State University, in cooperation with researchers from other states concerned with a similar survey.

Persons** conducting the interviews were selected from recruits made available in each city by the Division of Employment Security. Interviews arranged by appointment were made, after intensive training of interviewers

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*See Appendix C
**See Appendix A

in the use of the schedule and the conduct of the interview, under supervision of University personel, assisted by staff members from the Vocational Agriculture Division of the State Department of Education.

One area was under survey at a time, using facilities of the Division of Employment Security, and the aid of local chambers of commerce. A master list of all concerns to contact was developed for each area by graduate assistants in Agricultural Education at L. S. U., using as a guide the Yellow Pages of Southern Bell Telephone, membership lists of the several trade associations, and lists supplied by chambers of commerce.

A communication from the Dean of Agriculture at L. S. U. was directed to all listings, describing the research and it's importance to public education, with a plea for full cooperation among all concerned. This letter was supplemented in each area with one from the local chamber of commerce, sent through the agricultural committee.

All businesses and agencies found with one or more employees possessing and applying agricultural competencies were made a part of the survey--there were no outright refusals to participate; hence, it was assumed that data pertinent to the study were obtained from all agriculturally oriented establishments in the seven metropolitan areas covered.

A total of 1,067 establishments supplied useable employee information covering 9,087 workers, out of a total of 30,300, having and applying the knowledge or skill in agricultural subjects involved in their work. A distribution of firms and workers by cities follows:

City	No. of firms	Workers
Baton Rouge	153	2,495*
Alexandria	139	913
Shreveport	221	1,717
Lafayette	103	622
Lake Charles	90	508
Monroe	108	1,225
New Orleans	255	1,607

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* Excluding University employees

Treatment of Survey Information

Employee information obtained from the 1,067 concerns surveyed was organized and presented according to selected occupational families: 1) Farm Machinery, Sales and Services, 2) Farm Supplies and Equipment, 3) Livestock and Poultry, 4) Crops, Forestry and Soil Conservation, 5) Ornamental Horticulture, 6) Wildlife and Recreation, 7) Farm Service, and 8) Agricultural Services.

Information descriptive of each occupational family was assembled by occupational levels: 1) Professional, 2) Technical, 3) Managerial, 4) Supervisory, 5) Sales, 6) Office, 7) Skilled, 8) Semi-Skilled, and 9) Unskilled. Job titles found were identified at the different occupational levels, with a detailed description to be a part of a subsequent report.

Data were tabulated in table form, using shells prepared at the National Center for nation-wide use in reporting similiar surveys--they show: job titles, levels of employment, job entry age, salaries, educational levels associated with job entry, residential background preferred, farm experience preferred, agricultural subject matter areas in which employees must be trained, and kinds of continuing education required for job advancement.

Subject matter areas selected to show basic agricultural training required of prospective employees, or replacements, were: 1) Animal Science, 2) Plant Science, 3) Agricultural Business, Management, and Marketing, and 4) Farm Mechanics and Automation. Components of each area designed to determine specialized training needs will appear in another report.

PRESENTATION AND ANALYSIS OF SURVEY INFORMATION

The principal purpose of materials presented is to identify clusters of agricultural jobs found in agriculturally oriented businesses and agencies located in the larger urban areas of Louisiana, with special regard to educational qualifications needed by prospective workers to effect satisfactory job entrance and make progress in the job chosen. The presentation is made in an attempt to communicate agricultural occupational opportunities to those primarily concerned with rural youth who face problems in finding a place in the labor force more critical than for most urban youth.

Occupational Families

Agricultural businesses and agencies, other than farming, lend themselves to groupings called families which are appropriate to the nature of service performed. Each grouping offers a wide range of occupations, according to variations in concerns making up a particular family--specific jobs contained within a family grouping may require similar and yet different skills and abilities, depending upon level of performance and the work to be done.

All of the 1,067 businesses and agencies were categorized in one of the eight major occupational families, losing the identity of the individual concern in the process of classification. The individual concern is shown only by type of service under each family according to the following arrangement:

Types of Firms, Industries and Agencies

- Farm Machinery Sales and Service
  - Automation Equipment Co.
  - Farm Machinery and Equipment Dealer
  - Automobile Dealer
  - Contractors Equipment Co.
  - Farm Implement Co.

Farm Supplies and Equipment
- Hardware Store
- Fence Co.
- Department Store
- Feed and Seed Store
- Louisiana Agricultural Cooperatives
- Building Supply Store
- Dime Store
- Fertilizer Co.
- Wholesale Distributing Co.
- Agricultural Chemical Dealer
- Pet Market
- Garden Center
- Veterinarian Supply Co.
- Dairy Farm Equipment Dealer
- Farmers' Co-op.
- Lumber Co.

Livestock and Poultry
- Slaughter House
- Butcher Shop
- Meat Market
- Egg Processing Co.
- Milk Distributorship
- Creamery
- Wholesale Meat Distributor
- Dairy Products Co.
- Boarding Stables
- Livestock Auction Barn
- Rendering Plant
- Poultry Market
- Packing Plant
- Soap Co.
- Hatchery
- Grocery Store
- Poultry and Egg Processing Co.
- Poultry By-Products Co.
- Stockyard

Crops, Forestry and Soil Conservation
- Louisiana Forestry Commission
- Fruit Exchange Co.
- Tree Service Co.
- Logging Co.
- Produce Co.
- Rice By-Products Co.
- Coffee Co.
- Fruit Co.
- U. S. Forest Service
- Rice Mill
- Wood Preserving Co.
- Grain Co.
- Canned Food Co.
- Lumber Co. (sawmill)
- Tomato Co.

Crops, Forestry and Soil Conservation (Cont'd.)
- Oil Mill
- Pulpwood Co.
- Food Store
- Cotton Gin
- Cotton Brokerage Co.
- Paper Co.
- Planting Co.
- Sugar Coop.
- Cotton Products Co.
- Creosoting Co.
- Fruit Stand
- Cotton Division, Marketing Service

Ornamental Horticulture
- Garden Center
- Nursery
- Florist
- Landscape Co.
- Wholesale Forist

Wildlife and Recreation
- Golf Course
- State Park
- Riding Stable
- Taxidermist
- S. P. C. A.
- City Park
- National Park
- Playground
- Golf Course Service Co.
- Country Club
- Louisiana Wildlife and Fisheries Commission
- State Park and Recreation Commission

Farm Service
- Welding Co.
- Machine Shop
- Electric Power Supplier
- Pest Exterminating Co.
- Artificial Breeding Assoc.
- Credit Associations
- Farmers' Home Administration
- Radio Station
- Realty Co.
- Aero Farm Service
- Water Well Co.
- Auto Repair Shop
- Research Consulting Firm
- Building Contractor
- Livestock Brand Commission
- Television Station
- Insurance Co.
- Farm Service Laboratory
- Airplane Service

- Farm Service (Cont'd.)
  - Iron Works
  - Land and Oil Co.
  - Blacksmith
  - Farm Bureau

- Agricultural Service
  - Animal Hospital
  - Veterinarian
  - Agricultural Stabilization and Conservation
  - State College
  - Agricultural Extension Service
  - Soil Conservation Service
  - State Department of Agriculture
  - Vocational Agriculture Teacher
  - State Market Commission
  - State Department of Education
  - U. S. Department of Agriculture
  - Animal Disease Eradication (USDA)
  - Bank
  - State Land Office
  - Levee Board
  - Forestry Experiment Station
  - Plant Pest Control (USDA)
  - Federal Land Bank Assoc.
  - U. S. Air Force Base
  - State Fair Assoc.

Number of Nonfarm Agricultural Firms

All occupational families were well represented among the 1,067 businesses and agencies included in the survey, with a concentration of numbers dealing with services, a trend evident throughout the country.

TABLE I

NUMBER OF AGRICULTURAL BUSINESSES, INDUSTRIES, AND AGENCIES GROUPED BY OCCUPATIONAL FAMILY, 1964

Occupational Family	Number
Farm Machinery Sales and Service	38
Farm Supplies and Equipment	251
Livestock and Poultry	162
Crops, Forestry, & Soil Conservation	152
Ornamental Horticulture	111
Wildlife and Recreation	29
Farm Service	178
Agricultural Service	146
Total	1067

Almost one-half of the concerns were engaged in servicing the farmer, either with supplies, farm power with equipment, or educational services. Actual processing of farm products into consumable commodities was limited largely to two families: Livestock and Poultry Industries and Crops, Forestry, and Conservation; all of which leads to a preponderance of occupations, along with specific jobs in the general field of service.

The different kinds of agricultural organizations were well distributed over the State, with the exception of those under agricultural services--these were concentrated in the larger metropolitan areas in the form of agencies, both State and Federal. A heavy concentration of farm machinery, sales and services was found in the Monroe area, a situation in line with the dimensions of the agricultural section served by the City.

When ranked according to number of businesses and agencies, the occupational families assumed the position shown below:

Family	Business and Agencies	Rank
Farm Supplies and Equipment	251	1
Farm Service	178	2
Livestock and Poultry	162	3
Crops, Forestry, and Soil Conservation	152	4
Agricultural Service	146	5
Ornamental Horticulture	111	6
Farm Machinery Sales and Service	38	7
Wildlife and Recreation	29	8

The number of firms engaged in ornamental horticulture was suprisingly large for a State so recently rural. This is indicative of both urban development and increasing occupational opportunities provided by this area of service.

Equally interesting was the development shown by concerns engaged in wildlife and recreation. This development followed urban growth, including public parks, golf courses, and conservation of wildlife at the State level;

yet, it includes a movement of particular interest to farm land owners, in instances where farmers can divert acreage for recreational needs of the public.

Number Employed in Nonfarm Agriculture

A total of 30,300 workers were found in the 1,067 agricultural businesses and agencies made a part of the study. Of the total number of workers, 9,087 were required to have knowledge and skill in agricultural subjects as a job requisite, a number that was expected to grow to 9,836 during the next five year period.

TABLE II

NUMBER OF PERSONS EMPLOYED IN AGRICULTURAL BUSINESSES, INDUSTRIES AND AGENCIES, AND NUMBER OF EMPLOYEES HAVING AGRICULTURAL COMPETENCIES, BY OCCUPATIONAL FAMILY

Occupational Family	Total Number of Employees	Employees Having Agricultural Competencies: Current Employment	Employees Having Agricultural Competencies: Expected Employment Five Years Hence
Farm Machinery Sales and Service	1056	439	500
Farm Supplies and Equipment	6128	1308	1438
Livestock and Poultry	5326	1451	1519
Crops, Forestry, & Soil Conservation	5927	2305	2413
Ornamental Horticulture	872	748	845
Wildlife and Recreation	1536	300	339
Farm Service	4389	878	996
Agricultural Service	5066	1658	1786
Total	30300	9087	9836

Total employment in agriculturally oriented concerns not only "pointed up" the economic importance of agriculture in the big cities, but showed occupational possibilities other than for agriculture where a more general knowledge of agriculture would prove helpful. It was difficult for many executives to define lower and upper limits of agricultural knowledge and skill required of workers at a particular level or in a specific job title;

hence, those identified as having specialized knowledge and skill made up a minimum figure.

When ranked according to number of employees, and presumably economic importance, the occupational families placed as follows:

Family	Employees	Rank
Farm Supplies and Equipment	6,128	1
Crops, Forestry, and Soil Conservation	5,927	2
Livestock and Poultry	5,326	3
Agricultural Service	5,066	4
Farm Service	4,389	5
Wildlife and Recreation	1,536	6
Farm Machinery Sales and Service	1,056	7
Ornamental Horticulture	872	8

The number of workers engaged in servicing farmers reflects not only the economic status of the farmer, but the opportunities available in service occupations. Further, potential of vocational education programs geared to the total needs of agriculture is almost without limits.

Ranking the occupational families according to numbers of employees using knowledge and skill in agricultural subjects showed a slight different placing:

Family	Employees	Rank
Crops, Forestry, and Soil Conservation	2,413	1
Agricultural Service	1,786	2
Livestock and Poultry	1,519	3
Farm Supplies and Equipment	1,438	4
Farm Service	996	5
Ornamental Horticulture	845	6
Farm Machinery Sales and Service	500	7
Wildlife and Recreation	339	8

The position of the first four families was highly significant if numbers of employees can be considered related to occupational opportunities--about seven out of nine workers were employed in these four families.

All of the families were expected to grow, adding 749 agriculturally competent workers over the coming five-year period.

Job Titles by Occupational Families

For purposes of this study, a job title refers to a specific position held by a worker, or numbers of workers, who must have for satisfactory performance a knowledge and skill in agriculture of a particular nature, acquired prior to employment or developed by on-the-job training or other means open to him, such as firm and industry schools.

The 1,067 organizations reported the 9,087 workers under 1,582 job titles, an aggregate for all businesses and agencies. These were not necessarily different job titles except as they apply to a particular firm involving work peculiar to it. For instance, job titles under management appeared in numerous instances in almost identical form, yet the knowledge and skill in agricultural subjects differed from family to family because of the nature of service performed.

TABLE III

NUMBER OF JOB TITLES IN AGRICULTURAL OCCUPATIONS OTHER THAN FARMING, BY OCCUPATIONAL FAMILY

Occupational Family	Number of Job Titles	Number of Job Titles Five Years Hence
Farm Machinery Sales and Service	97	120
Farm Supplies and Equipment	242	258
Livestock and Poultry	292	310
Crops, Forestry, & Soil Conservation	318	364
Ornamental Horticulture	102	125
Wildlife and Recreation	56	63
Farm Service	199	255
Agricultural Service	276	300
Total	1,582	1,795

Crops, Forestry, and Soil Conservation contained the most job titles, along with the largest number of workers using a knowledge of agricultural subjects. A ranking of families according to number of job titles shows relative position as to scope in kinds of work offered:

Family	Job Titles	Rank
Crops, Forestry, and Soil Conservation	318	1
Livestock and Poultry	292	2
Agricultural Service	276	3
Farm Supplies and Equipment	242	4
Farm Service	199	5
Ornamental Horticulture	102	6
Farm Machinery Sales and Service	97	7
Wildlife and Recreation	56	8

All of the families were expected to grow, adding 213 job titles over the next five year period. Growth in number of job titles implied increasing occupational opportunities for youth on a front of expanding dimensions.

The detailing of information describing job titles would tax the resources of this Report; hence, the clustering of titles, together with agricultural competencies involved, must of necessity be left to another publication.

For the convenience of readers who may desire to identify titles found within each occupational family and level of employment, a complete listing and classification is provided in Appendix D. The number and wide range of jobs shown supports the new concept of training rural youth for the labor market developing in farm oriented businesses and agencies located in large urban areas.

Levels of Employment by Occupational Families

Occupational opportunities for the individual is closely related to available job titles at the different levels of employment within an occupational family that interests him. Level of employment gives structure to formal education required and is indicative of salary or wages to expect, while the job title indicates lines of applied training to follow.

A classification of all workers found with agricultural training is shown in Table IV, according to levels of employment in the several occupational families.

TABLE IV

TOTAL EMPLOYEES WITH AGRICULTURAL TRAINING BY LEVELS OF EMPLOYMENT IN OCCUPATIONAL FAMILIES

Occupational Families	Levels of Employment									
	Prof.	Techn.	Mang.	Superv.	Sales	Office	Skilled	Semi-Skilled	Un-skilled	Total
Farm Machinery Sales and Service	2	0	95	15	118	10	160	37	2	439
Farm Supplies and Equipment	7	10	362	45	385	150	27	167	155	1308
Livestock and Poultry	3	50	260	155	300	74	244	273	92	1451
Crops, Forestry, & Soil Conservation	227	67	297	92	154	91	175	661	541	2305
Ornamental Horticulture	19	1	151	18	72	11	79	35	362	748
Wildlife and Recreation	6	0	25	34	0	0	7	33	195	300
Farm Service	41	65	201	41	91	43	192	172	32	878
Agricultural Service	446	745	123	33	9	195	12	25	70	1658
Total	751	938	1514	433	1129	574	896	1403	1449	9087

Employees at the professional level were limited almost entirely to 1) Agricultural Service, and 2) Crops, Forestry, and Soil Conservation--both families require a large proportion of college graduates trained in agriculture. Technical workers who usually serve with, but under professional people were concentrated in Agricultural Service, with much lesser numbers in 1) Farm Service, 2) Livestock and Poultry, and 3) Farm Crops, Forestry, and Soil Conservation. The need for technicans is a relatively recent discovery, and opens up new fields of opportunities to youth. The general belief that one or more jobs of technical level exist for every professional worker is supported in this research.

The importance of management and supervision is evident by numbers employed at these levels, well distributed over all concerns surveyed, and emphasizes the need for workers at these levels who must have broader knowledge about more things at the right time.

All businesses sharing the survey employed salesmen who were required to be knowledgeable in agricultural subjects. Many of the businesses were practically dependent upon the ability of sales personnel for maintenance and growth, especially in cases where farmers were the major market outlet.

The number of office workers needing competencies in agriculture was unexpected, yet appeared factual in concerns where all or a portion of the office help came in contact with farmers, making communications in agricultural subjects necessary.

Slightly more than a third of the workers were at the skilled or below skill levels, yet only 1,449, or 15 per cent of total workers, were considered unskilled, although all of those reported were required to have some knowledge of agricultural subjects.

A ranking of occupational levels by numbers of workers above the unskilled gives a clearer picture of occupational opportunities offered at each level of employment:

Level	Number of Workers	Rank
Management	1,541	1
Semi-skilled	1,403	2
Sales	1,129	3
Technicans	938	4
Skilled	896	5
Professional	751	6
Office	574	7
Supervisor	433	8

Professional people employed in State colleges and universities located in the areas surveyed were not included in these figures. Their inclusion would move the professional level to first place inasmuch as Louisiana State University alone has 785 employees in agriculture of professional rank. Technicans employed would likewise increase the number working at this level.

Entry into the professional and managerial levels usually requires education and training beyond the high school, typically a college degree. In some cases graduation from a professional school is involved, such as forestry, veterinary science or engineering.

Job Entry Age Into Off-The-Farm Agriculture Occupations

Table V shows averages of ages for all levels of employment, taking into account job entry age, age of employees at time of survey, and maximum age for first employment; subsequent Tables VI-1 through VI-8 show the same information by occupational families and level of employment.

Age of all employees with agricultural training in the population surveyed varied but little among the different levels of employment. From 32 to 38 was the range in ages, with an overall average approximating 35 years.

The average entry age which employers considered right for first employment ranged from 25 to 28, giving an average approximating 26 for

TABLE V

AVERAGE PRESENT AGE---AVERAGE MINIMUM AND AVERAGE MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURE OCCUPATIONS BY LEVEL OF EMPLOYMENT

Level of Employment	Present	Minimum	Maximum
Professional	34	26	43
Technical	34	25	45
Managerial	38	28	46
Supervisory	38	27	47
Sales	35	26	45
Clerical	33	25	43
Skilled	34	26	45
Semi-Skilled	32	25	43
Unskilled	35	25	45

all levels of employment. The lack of younger prospective employees with the qualifications needed to effect job entry was held accountable for delaying first employment to age 26. Younger people with education and training required would be acceptable.

Maximum age for first employment focused upon age 45, based upon employer assumption that at least 20 years of service would be rendered before retirement at 65.

Differences in age experiences among the occupational families were not significant, that is, all families had a working force averaging about 35, with 26 being the minimum for first entry age and 45 the maximum.

TABLE VI-1

AVERAGE PRESENT AGE---AVERAGE MINIMUM AND AVERAGE MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURE OCCUPATIONS BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

Farm Machinery Sales and Service			
Level of Employment	**Present**	**Minimum**	**Maximum**
Professional	30	25	25
Technical	0	0	0
Managerial	35	27	41
Supervisory	37	28	42
Sales	33	25	43
Office	34	25	44
Skilled	36	25	46
Semi-Skilled	32	25	40
Unskilled	43	24	45

TABLE VI-2

AVERAGE PRESENT AGE---AVERAGE MINIMUM AND AVERAGE MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURE OCCUPATIONS BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

Farm Supplies & Equipment			
Level of Employment	**Present**	**Minimum**	**Maximum**
Professional	33	28	38
Technical	38	26	53
Managerial	36	27	45
Supervisory	35	28	45
Sales	32	25	43
Office	31	25	41
Skilled	30	25	44
Semi-Skilled	30	25	43
Unskilled	36	25	45

TABLE VI-3

AVERAGE PRESENT AGE---AVERAGE MINIMUM AND AVERAGE MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURE OCCUPATIONS BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

	Livestock and Poultry		
Level of Employment	Present	Minimum	Maximum
Professional	30	25	50
Technical	31	25	42
Managerial	39	28	45
Supervisory	38	28	43
Sales	35	26	45
Office	31	25	42
Skilled	37	27	45
Semi-Skilled	31	25	41
Unskilled	29	25	41

TABLE VI-4

AVERAGE PRESENT AGE---AVERAGE MINIMUM AND AVERAGE MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURE OCCUPATIONS BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

	Crops, Forestry, & Soil Conservation		
Level of Employment	Present	Minimum	Maximum
Professional	31	26	45
Technical	29	26	41
Managerial	35	28	43
Supervisory	37	26	41
Sales	38	26	47
Office	34	26	42
Skilled	37	28	44
Semi-Skilled	28	25	38
Unskilled	34	25	44

TABLE VI-5

AVERAGE PRESENT AGE---AVERAGE MINIMUM AND AVERAGE MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURE OCCUPATIONS BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

Ornamental Horticulture			
Level of Employment	Present	Minimum	Maximum
Professional	31	25	44
Technical	35	25	45
Managerial	41	31	51
Supervisory	34	25	50
Sales	37	26	48
Office	30	25	43
Skilled	31	25	45
Semi-Skilled	38	25	50
Unskilled	36	26	48

TABLE VI-6

AVERAGE PRESENT AGE---AVERAGE MINIMUM AND AVERAGE MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURE OCCUPATIONS BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

Wildlife and Recreation			
Level of Employment	Present	Minimum	Maximum
Professional	48	28	54
Technical	0	0	0
Managerial	39	26	48
Supervisory	47	24	55
Sales	0	0	0
Office	0	0	0
Skilled	32	25	49
Semi-Skilled	30	25	49
Unskilled	35	28	53

TABLE VI-7

AVERAGE PRESENT AGE---AVERAGE MINIMUM AND AVERAGE MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURE OCCUPATIONS BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

Farm Service			
Level of Employment	Present	Minimum	Maximum
Professional	33	26	43
Technical	34	25	46
Managerial	40	28	46
Supervisory	39	27	48
Sales	38	26	43
Office	36	26	44
Skilled	31	28	47
Semi-Skilled	28	25	38
Unskilled	30	25	38

TABLE VI-8

AVERAGE PRESENT AGE---AVERAGE MINIMUM AND AVERAGE MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURE OCCUPATIONS BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

Agricultural Service			
Level of Employment	Present	Minimum	Maximum
Professional	35	25	48
Technical	36	25	45
Managerial	36	27	46
Supervisory	36	26	49
Sales	34	25	47
Office	34	25	48
Skilled	40	24	43
Semi-Skilled	39	25	44
Unskilled	33	24	46

Monthly Salaries or Wages in Occupations Other Than Farming

Salaries for all occupational families were obtained on a monthly basis for all levels of employment, recording entrance, and maximum salaries reached with tenure. The schedule used provided for salary ranges, having an upper limit of $700.00, plus; hence, where this figure is shown it implies a minimum with tenure rather than the designation "maximum" shown in the tables.

Table VII telescopes salaries for all occupational families, according to occupational levels. Tables VIII-1 through VIII-8 show salaries for each family by levels of employment.

Significant similarities in salary schedules were reported by all businesses and agencies, showing a practice of paying employees in relation to education and responsibilities, beginning with low level pay for the unskilled followed by substantial increments for the skilled and continuing upward through the management and professional levels.

TABLE VII

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING BY LEVEL OF EMPLOYMENT

	Median Monthly Salary	
Level of Employment	Beginning	Maximum
Professional	464.95	651.27
Technical	423.17	560.67
Managerial	431.72	621.03
Supervisory	385.58	537.49
Sales	349.94	579.41
Office	283.34	399.53
Skilled	289.02	444.64
Semi-Skilled	237.25	334.55
Unskilled	202.32	262.01

The different occupational levels maintained their relative position in the salary schedule as employees advanced in pay towards the maximum.

The significant difference appeared in the spread between entrance and maximum pay for the different levels; it was negligible for the unskilled, amounting to $60.00, but increased to $100.00 for the semi-skilled, with increases up to and exceeding $200.00 for occupational levels at the upper limits of the pay scale.

The occupational families varied in pay scales for the several levels, yet generally professional and managerial levels were at the top of the scale with unskilled at the bottom.

While the semi-skilled and unskilled levels require lesser amounts of education and training and together make up 31 per cent of the workers, they did not offer satisfactory beginning pay and had definite limitation for pay increases following tenure. Undoubtedly, among those employed at these levels were many who were underemployed and would advance by promotion to a higher job level.

TABLE VIII-1

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

Farm Machinery Sales and Service

Level of Employment	Median Monthly Salary	
	Beginning	Maximum
Professional	376.00	476.00
Technical	000.00	000.00
Managerial	442.34	654.50
Supervisory	367.67	514.19
Sales	386.43	670.36
Office	275.33	405.17
Skilled	267.18	415.30
Semi-Skilled	275.52	403.25
Unskilled	198.50	220.50

TABLE VIII-2

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

Farm Supplies & Equipment

Level of Employment	Median Monthly Salary	
	Beginning	Maximum
Professional	432.25	707.25
Technical	392.67	576.00
Managerial	443.30	658.15
Supervisory	401.00	510.69
Sales	321.49	565.56
Office	270.31	341.05
Skilled	301.63	447.92
Semi-Skilled	236.67	380.54
Unskilled	196.28	251.41

TABLE VIII-3

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

Livestock and Poultry

Level of Employment	Median Monthly Salary	
	Beginning	Maximum
Professional	551.00	701.00
Technical	349.96	479.65
Managerial	449.81	667.01
Supervisory	455.17	598.72
Sales	363.00	653.67
Office	278.30	436.81
Skilled	272.04	394.49
Semi-Skilled	254.71	348.14
Unskilled	218.63	304.83

TABLE VIII-4

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

Crops, Forestry, & Soil Conservation

Level of Employment	Median Monthly Salary	
	Beginning	Maximum
Professional	506.22	638.59
Technical	412.18	573.51
Managerial	430.26	647.24
Supervisory	372.52	515.82
Sales	381.73	594.26
Office	248.07	362.60
Skilled	272.19	426.37
Semi-Skilled	230.24	318.80
Unskilled	194.66	296.49

TABLE VIII-5

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

Ornamental Horticulture

Level of Employment	Median Monthly Salary	
	Beginning	Maximum
Professional	341.63	677.56
Technical	651.00	726.00
Managerial	309.06	542.93
Supervisory	315.21	468.13
Sales	226.96	309.76
Office	230.16	331.55
Skilled	268.36	493.08
Semi-Skilled	219.45	291.78
Unskilled	213.49	268.12

TABLE VIII-6

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

Wildlife and Recreation

Level of Employment	Median Monthly Salary	
	Beginning	Maximum
Professional	492.67	592.67
Technical	000.00	000.00
Managerial	368.73	481.45
Supervisory	368.71	534.33
Sales	000.00	000.00
Office	000.00	000.00
Skilled	344.75	494.75
Semi-Skilled	211.21	262.88
Unskilled	186.21	277.08

TABLE VIII-7

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

Farm Service

Level of Employment	Median Monthly Salary	
	Beginning	Maximum
Professional	514.89	712.25
Technical	436.21	491.11
Managerial	497.45	695.92
Supervisory	390.83	601.47
Sales	412.72	636.29
Office	329.93	438.80
Skilled	297.02	454.99
Semi-Skilled	248.15	351.02
Unskilled	224.54	248.79

TABLE VIII-8

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

Agricultural Service		
Level of Employment	Median Monthly Salary	
	Beginning	Maximum
Professional	504.92	704.81
Technical	296.99	517.76
Managerial	512.83	674.80
Supervisory	413.50	556.56
Sales	357.25	626.00
Office	351.34	480.61
Skilled	344.08	430.19
Semi-Skilled	222.00	320.00
Unskilled	186.26	228.85

Educational Level Desired of Workers in Nonfarm Agriculture

Education and occupational training were deemed imperative in all aspects of nonfarm agriculture to insure high quality performance of individual workers, regardless of occupational family or employment level.

Table IX depicts educational level desired for persons entering agricultural occupations other than farming, showing clearly emphasis placed upon formal education.

TABLE IX

EDUCATIONAL LEVEL DESIRED FOR PERSONS ENTERING AGRICULTURAL OCCUPATIONS OTHER THAN FARMING

Occupational Family	Number of Employees					
	Less Than H. S.	H.S. Graduate	Post H.S. Technical Education	Some College	College Completion	No Preference
Farm Machinery Sales and Service	17	183	47	95	48	49
Farm Supplies and Equipment	80	639	54	218	234	83
Livestock and Poultry	166	702	76	206	234	67
Crops, Forestry,& Soil Conservation	327	1215	41	262	386	74
Ornamental Horticulture	128	312	9	97	60	142
Wildlife and Recreation	107	128	2	21	13	29
Farm Service	80	362	67	172	159	38
Agricultural Service	48	456	24	331	780	19
Total	953	3997	320	1402	1914	501

In the main, replacements for 9,087 workers found in metropolitan agriculture will be made from applicants possessing a high school education plus some college training: only 16 per cent will be replaced as vacancies occur with persons having less than a high school education and the majority of these will be placements at the unskilled level, according to management of the 1,067 establishments covered by the research.

Generally, every ten replacements must include at least four having a high school diploma and post high school training: two of the four must be college graduates, while the other two must have experienced some college work or have been trained in a technical school.

Agricultural Service, followed by Crops, Forestry, and Conservation, contained the most employees required to have a college degree, although all occupational families had considerable numbers. If university and college agricultural personnel were added, then the significance of a college education for nonfarm agricultural occupations would be more fully realized, since all institutions in the areas surveyed had more than 800 agriculturally trained workers. Including this number would have increased the ratio of college graduates employed in nonfarm agriculture to slightly more than one to four.

The need for prospective employees having a background of high school and college experience, in addition to occupational training prior to job entry, was quite obvious throughout the survey and among all sectors of nonfarm agriculture contacted.

There was a strong tendency among all employers to restrict first employment to applicants having at least a high school education; also, consistent interest was expressed in behalf of high school programs more closely interwoven with nonfarm agricultural businesses.

Residential Background Preferred For New Employees

A farm background is not an absolute requirement for entering occupations found in nonfarm agriculture, yet it was considered desirable for at least 41 per cent of the workers reported in this research.

Table X shows the kind of background preferred by nonfarm agriculture for new employees:

TABLE X

RESIDENTIAL BACKGROUND PREFERRED FOR NEW EMPLOYEES

Occupational Family	Farm		Rural Nonfarm		Urban		No Preference	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Farm Machinery Sales and Service	232	53.0	10	3.0	0	0.0	197	44.0
Farm Supplies and Equipment	355	27.0	30	2.0	55	4.0	868	67.0
Livestock and Poultry	404	28.0	13	1.0	10	1.0	1024	70.0
Crops, Forestry, & Soil Conservation	1098	48.0	152	7.0	9	0.5	1046	45.5
Ornamental Horticulture	158	21.0	9	1.0	4	1.0	577	77.0
Wildlife and Recreation	47	16.0	16	5.0	1	0.5	236	77.5
Farm Service	345	39.0	42	5.0	17	0.2	474	54.0
Agricultural Service	791	48.0	78	5.0	3	0.1	786	46.9
Total	3430		350		99		5208	

To perform the work engaged in by 57 per cent of the workers, no preference was expressed by management describing source of workers when given a choice between farm reared, rural nonfarm, or urban reared. Rather, emphasis was placed upon the ability to perform the work to be done without prejudice as to where competencies may have been acquired.

Employers expressing a preference as to residential background for new employees indicated that 41 per cent of the total workers should be farm reared in contrast to one per cent with an urban background, giving the farm boy a "head start" over the urban boy.

Occupational families preferring the greatest percentage of farm reared workers were: Farm and Agricultural Services; Crops, Forestry, and Soil Conservation; and Farm Machinery Sales and Service.

Farm Experience Preferred For New Employees

Employees numbering up to 3,430 would be replaced as vacancies occur with persons having a farm residential background. Table XI shows employer preference as to the kind of a farm involved: commercial, non-commercial, or no preference between the two.

TABLE XI

FARM EXPERIENCE PREFERRED FOR NEW EMPLOYEES

	FARM					
Occupational Family	Commercial		Non-Commercial		No Preference	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
Farm Machinery Sales and Service	125	54.0	49	21.0	58	25.0
Farm Supplies and Equipment	169	48.0	93	26.0	93	26.0
Livestock and Poultry	214	53.0	76	19.0	114	28.0
Crops, Forestry & Soil Conservation	202	18.0	440	40.0	456	42.0
Ornamental Horticulture	97	61.0	28	18.0	33	21.0
Wildlife and Recreation	4	9.0	16	34.0	127	57.0
Farm Service	150	43.0	113	33.0	82	24.0
Agricultural Service	373	47.0	259	33.0	159	20.0
Total	1334		1074		1022	

Experience gained on the commercial farm took precedence over that obtained on the non-commercial farm, yet for one-third of the workers no preference was indicated between the two kinds of farms as a source of farm experience. Most employers felt that a farm oriented background was highly desirable for most employees, at least for those dealing directly with farmers; even so, they were unwilling to restrict employment to those with a farm background or to a particular kind of a farm.

Agricultural Areas in Which Nonfarm Agricultural Workers Must Have Competencies

A major objective of the research dealt with obtaining data of the kind and scope required for making determinations relating to the knowledge and skill in agricultural subjects required for job entry in nonfarm agricultural occupations.

To guide interviewees in supplying information descriptive of agricultural competencies involved in the different job titles, agricultural subject matter was segregated into four general areas: Plant Science, Animal Science; Farm Mechanics; and Management and Marketing. Each subject matter area was further separated into parts describing more specialized information for aiding those interviewed in identifying special areas of knowledge associated with the work of a particular job title.

Tables XII-1 through XII-8 show by occupational families and each level of employment the number of workers having and using competencies in one or more of the agricultural subject matter areas--presumably, replacements would be expected to be knowledgeable in the same areas. Segments of each area were associated with specific job titles and are not treated in this Report.

Certain disernable trends were established in all occupational families: 1) generally, a rather broad coverage of all subject matter areas was required of all workers, 2) the work performed within a particular family tended to prescribe the subject matter area or areas involved, 3) workers at the management and supervisory levels were widely knowledgeable, and 4) employees at the professional, technical, and skilled levels were intensively trained in a particular area or one of the divisions of subject matter making up an area.

Factual evidence supporting the need for agricultural training at sales and office employment levels was significant, giving impetus to a much broader program of training for persons serving at these levels in contrast to what is envisioned, generally.

In the process of compiling data on employee qualifications, it was made crystal clear that it was no longer satisfactory to have prospective workers available in sufficient numbers and willing to work; there was a premium on education and occupational training, intensifying the need for qualified persons to enter the expanding field of urbanized agriculture.

Each occupational family reflects a "cluster" of jobs, an approach adaptable to each occupational level and basic to developing appropriate training programs, especially where job titles combine a number of skills or have in common a particular core of subject matter, like in management, marketing or supervision.

Training in Agricultural Business and Management was emphasized for workers at all levels, except those in the skilled and unskilled levels. Such emphasis parallels the tremendous employment opportunities for persons in management.

TABLE XII-1

AGRICULTURAL AREAS IN FARM MACHINERY SALES AND SERVICE WITH WHICH EMPLOYEES MUST BE FAMILIAR

Level of Employment	No.	Agricultural Subject Areas (Employee Frequency) Animal Science	Plant Science	Agri.Bus. Mangt. and Marketing	Agri. Mech. and Automation
Professional	2	0	0	0	2
Technical	0	0	0	0	0
Managerial	95	42	51	60	70
Supervisory	15	8	6	10	15
Sales	118	60	82	73	110
Office	10	1	1	10	2
Skilled	160	53	54	24	160
Semi-Skilled	37	4	4	6	27
Unskilled	2	0	1	0	2
Total	439				

TABLE XII-2

AGRICULTURAL AREAS IN FARM SUPPLIES AND EQUIPMENT WITH WHICH EMPLOYEES MUST BE FAMILIAR

Level of Employment	No.	Agricultural Subject Areas (Employee Frequency) Animal Science	Plant Science	Agri.Bus. Mangt. & Marketing	Agri. Mech. & Automation
Professional	7	2	7	5	5
Technical	10	1	7	6	8
Managerial	362	169	279	236	124
Supervisory	45	14	38	30	36
Sales	385	191	260	236	174
Office	150	39	72	75	30
Skilled	27	13	16	12	17
Semi-Skilled	167	32	56	5	137
Unskilled	155	48	44	15	117
Total	1308				

TABLE XII-3

AGRICULTURAL AREAS IN LIVESTOCK AND POULTRY WITH WHICH EMPLOYEES MUST BE FAMILIAR

Level of Employment	No.	Agricultural Subject Areas (Employee Frequency) Animal Science	Plant Science	Agri.Bus. Mangt. & Marketing	Agri. Mech. & Automation
Professional	3	3	2	2	2
Technical	50	50	6	11	3
Managerial	260	222	67	189	82
Supervisory	155	140	50	119	65
Sales	300	257	71	201	52
Office	74	61	3	50	3
Skilled	244	221	8	22	60
Semi-Skilled	273	176	0	1	101
Unskilled	92	59	1	5	49
Total	1451				

TABLE XII-4

AGRICULTURAL AREAS IN CROPS, FORESTRY, & SOIL CONSERVATION WITH WHICH EMPLOYEES MUST BE FAMILIAR

Level of Employment	No.	Agricultural Subject Areas (Employee Frequency)			
		Animal Science	Plant Science	Agri. Bus. Mangt. and Marketing	Agri. Mech. and Automation
Professional	227	78	219	198	183
Technical	67	7	64	29	34
Managerial	297	122	257	255	101
Supervisory	92	20	71	49	48
Sales	154	17	135	68	27
Office	91	23	32	74	2
Skilled	175	28	110	54	109
Semi-Skilled	661	42	545	16	204
Unskilled	541	104	362	0	210
Total	2305				

TABLE XII-5

AGRICULTURAL AREAS IN ORNAMENTAL HORTICULTURE WITH WHICH EMPLOYEES MUST BE FAMILIAR

Level of Employment	No.	Agricultural Subject Areas (Employee Frequency)			
		Animal Science	Plant Science	Agri. Bus. Mangt. and Marketing	Agri. Mech. and Automation
Professional	19	2	13	10	5
Technical	1	1	1	1	1
Managerial	151	3	137	111	66
Supervisory	18	0	18	9	5
Sales	72	3	72	42	11
Office	11	0	8	7	0
Skilled	79	0	69	21	11
Semi-Skilled	35	2	30	0	8
Unskilled	362	3	309	11	164
Total	748				

TABLE XII-6

AGRICULTURAL AREAS IN WILDLIFE AND RECREATION WITH WHICH EMPLOYEES MUST BE FAMILIAR

Level of Employment	No.	Agricultural Subject Areas (Employee Frequency)			
		Animal Science	Plant Science	Agri. Bus. Mangt. and Marketing	Agri. Mech. and Automation
Professional	6	5	6	3	3
Technical	0	0	0	0	0
Managerial	25	17	22	19	20
Supervisory	34	16	34	19	22
Sales	0	0	0	0	0
Office	0	0	0	0	0
Skilled	7	2	4	1	3
Semi-Skilled	33	0	28	3	29
Unskilled	195	32	116	2	110
Total	300				

TABLE XII-7

AGRICULTURAL AREAS IN FARM SERVICE WITH WHICH EMPLOYEES MUST BE FAMILIAR

Level of Employment	No.	Agricultural Subject Areas (Employee Frequency)			
		Animal Science	Plant Science	Agri. Bus. Mangt. and Marketing	Agri. Mech. and Automation
Professional	41	25	38	30	25
Technical	65	57	22	19	25
Managerial	201	156	163	184	154
Supervisory	41	26	28	24	23
Sales	91	57	77	69	56
Office	43	13	15	31	4
Skilled	192	58	54	54	157
Semi-Skilled	172	116	127	2	37
Unskilled	32	1	2	0	30
Total	878				

TABLE XII-8

AGRICULTURAL AREAS IN AGRICULTURAL SERVICE WITH WHICH EMPLOYEES MUST BE FAMILIAR

		Agricultural Subject Areas (Employee Frequency)			
Level of Employment	No.	Animal Science	Plant Science	Agri. Bus. Mangt. and Marketing	Agri. Mech. and Automation
Professional	446	244	396	362	187
Technical	745	357	597	248	118
Managerial	123	101	116	120	26
Supervisory	33	25	26	14	13
Sales	9	3	9	9	3
Office	195	52	71	160	23
Skilled	12	1	4	2	11
Semi-Skilled	25	6	20	19	2
Unskilled	70	47	9	1	32
Total	1658				

Continuing Education Required of Nonfarm Agricultural Employees

A majority of the employees found in nonfarm agriculture, 80 per cent, were required to continue their education in order to advance on the job or to enter another and more remunerative job title.

Table XIII shows the number of employees pursuing educational programs at the time of the survey, along with the kind of training facility used.

TABLE XIII

CONTINUING EDUCATION REQUIRED OF EMPLOYEES AND EDUCATIONAL FACILITIES USED

		Number of Employees (Frequency)					
Occupational Family	No.	Firm or Industry School	On-the-Job Training	Pub.Sch. Adult Educ.	Vocational School	Agri. College	None
Farm Machinery Sales and Service	439	289	266	11	70	15	14
Farm Supplies and Equipment	1308	378	925	65	136	119	133
Livestock and Poultry	1451	649	938	42	40	105	139
Crops, Forestry,& Soil Conservation	2305	484	1282	35	185	200	928
Ornamental Horticulture	748	254	468	14	111	124	105
Wildlife and Recreation	300	22	234	2	9	57	37
Farm Service	878	345	676	17	59	125	156
Agricultural Service	1658	304	999	46	23	192	478
Total	9087	2725	5788	232	633	937	1990

On the job training programs were used to upgrade employees in at least 70 per cent of the cases, supplemented by firm and industry schools, agricultural colleges, vocational schools, and adult education programs.

The pattern emerging in vocational education provides for appropriate training and retraining of the agricultural working force consistent with its needs. To implement this movement, training or retraining opportunities must be expanded for youths and adults, both unemployed and at work.

In comments made aside from giving factual information, employers held that reliance upon on-the-job training as the chief resource for upgrading employees was owing to the absence of appropriate training at the high school or post high school levels. The need for such programming is "pointed up" by efforts being made in all concerns to have employees almost continually subjected to some sort of vocational train'ng.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The results of research just described is in response to a growing concern about "tuning up" vocational agriculture to keep pace with the occupational outlook for rural youth, especially in agriculture where many traditional jobs have disappeared and new ones are emerging, not only requiring a whole new set of agricultural competencies, but demanding environmental adjustments appropriate to urban living.

Passage of the National Vocational Education Act in December, 1963, provided the stimulus necessary to "shock" vocational agriculture into a state of change. Now educators at all levels, together with leadership in all segments of agriculture, are searching for new programs tuned to the needs of changing times. Once such programs are in supply, resources must be assembled to implement them.

Rural youth, both farm and nonfarm, attend college in relatively fewer numbers in contrast to urban youth---more of them enter the labor market directly after high school graduation. Early identification of their occupational aspirations and talents is essential to obtaining the basic education, job training, and guidance so necessary for satisfactory job entry.

The increasing reliance on job opportunities in urban areas focuses attention upon research designed to promote programs extensions; also, to inform school administrators, counselors, and teachers of the kind of training needed in their areas as well as statewide.

Results of this study have broad implications, identifying positive factors that, when cultivated, will help broaden the program of vocational agriculture in Louisiana to provide training for gainful employment in the occupations emerging in nonfarm agriculture. Effecting such a program is dependent upon a thorough understanding of the problem by all interested:

school administrators, supervisors, counselors and teachers, also, the management of businesses and agencies comprising nonfarm agriculture.

Summary

Successful opportunities are available to Louisiana rural boys to engage in agricultural careers found in the various segments of nonfarm agriculture located in the metropolitan areas of the State.

No longer must the farm boy look to farming alone for an occupation, if he wishes to stay in agriculture. Emphasis is shifting from traditional farmer training in favor of newer programs that will train the type of farmer needed for tomorrow's farming. Accelerating public interest demands an improved program which truly reflects adjustments in agriculture now occurring across the whole agrarian front.

The number of workers found in the areas surveyed were reported in two categories: those for occupational analysis who were directly associated with agricultural products and services; and those classified as serving agriculture economically, but not actually engaged in an agricultural occupation.

The primary purpose of the research was to not only identify the workers who were directly concerned with farm products or agricultural services, but to determine competencies in agriculture associated with satisfactory job performance. Employees not required to be knowledgeable in agricultural subjects were not processed, although undoubtly many of them had knowledge or skill in agriculture or were acquiring such abilities in pursuit of job advancement. Their real significance should not be overlooked when planning vocational programs---training opportunities should be made equally available to them, either prior to employment or through adult instruction after employment.

Admittedly, in education it is far more simple to describe conditions needing change than to prescribe what is needed to replace practices that are considered obsolete. Still, educators must arrive at solutions - and to make progress some guideposts must be established.

The research under analysis was undertaken on the assumption that vocational agriculture had to take on new dimensions, largely because of the increasing interdependency woven into both farm and nonfarm agricultural organizations. The problem of the moment is how to make full utilization of rural boys---their interests, experiences and talents--in a complex society where it becomes necessary to educate for both into and out of farming.

Presently over the nation, the results of surveys are being used to establish new directions in vocational agriculture preparatory to promoting program expansions, and informing school administrators and teachers of training needs in their areas as well as statewide. Generally, it is conceded that as the farm evolution continues, an increasing number of young people and adults must seek employment outside of farming. The findings of this study will be of value in providing them with adequate education and training:

1) In the seven metropolitan areas of Louisiana, a total of 1,067 businesses and agencies comprised a huge farm oriented complex, employing 30,300 workers, of which 9,087 were required to have knowledge and skill in agricultural subjects for satisfactory job performance--a number that is expected to increase by 749, or 8 per cent, over the next five year period.
2) The 9,087 workers with agricultural competencies were found holding a total of 1,582 job titles. Over the next five years, this number will expand to 1,795, an increase of 13 per cent.
3) Occupational families containing the greatest number of workers

were those dealing with crops and soil conservation; agricultural service; livestock and poultry; and farm supplies and equipment. They also had the greatest number of job titles.

4) The 1,067 businesses and agencies were engaged in a wide range of business and service operations, especially those dealing directly with farm and agricultural services. There was an absence of "heavy" agricultural industry among the business firms, yet all occupational families were well represented, providing a whole catalogue of job titles at the different levels of employment.

5) Workers with agricultural competencies were in greatest numbers at the management, semi-skilled, unskilled, and sales levels. Professional workers were restricted almost entirely to the Crops, Forestry and Soil Conservation, and Agricultural Service families. Adding workers at the professional level employed at colleges and universities in the areas surveyed, would place professional workers ahead of management--at the same time, technical workers would advance as a group.

6) Semi-professional workers, commonly identified as technicians, exceeded the number of professional workers, also those working at the skilled level.

7) A definite pattern was followed by all businesses and agencies in fixing minimum and maximum ages for job entry: a minimum of age 26 for first employment and a maximum of age 45. Present age of workers focused upon 35, showing a body of relatively young employees.

8) Pay schedules in all concerns followed a similar design: workers were paid according to education, training and responsibility,

beginning with low level pay for the unskilled followed by substantial increments for the skilled and continuing upward through the management and professional levels. Proportionate advances in pay were given with tenure, with the exception for the semi-skilled and unskilled categories where pay was continued at low levels.

9) Generally, replacement of workers in all occupational families was made from applicants having a high school education, plus some post high school training. Only about one in six workers with less than a high school diploma was considered employable. Taking into account all professional employed workers in the areas surveyed, one in four prospective employees was expected to have a college degree.

10) A farm background was not requirement for employment, yet it was considered desirable in over 40 per cent of the employee cases. Experience gained by the prospective employee on a commercial farm was preferred over that obtained on a noncommercial farm. There was no discrimination against the urban reared job applicant, however, no cases were recorded where an urban residential background was preferable to the farm.

11) The composition of subject matter in agriculture required of employees varied according to the work performed in each occupational family, although certain similarities existed: 1) generally, broad coverage of subject matter was required of all workers above the semi-skilled and unskilled levels; 2) employees at the management and supervisory levels were widely knowledgeable, in addition to having specialized knowledge in relation to a particular business; and 3) workers at the professional, technical,

and skilled levels possessed knowledge and skill in a specific subject matter area, or a component part of an area.

12) Upgrading and refresher training of employees was stressed by all employers, using on-the-job training and firm or industry schools as the chief means of effecting such training. Infrequent use was made of the public school system.

13) The great majority of jobs contained in the 1,067 establishments were without restrictions, except as to education and training. Some of the agencies had job titles requiring civil service ratings, while a few of the businesses were under contract with labor. Most job titles at the professional level required a college degree and in some instances a professional degree--- a few titles at the technical level required the holder to be licensed.

14) A decided growth in terms of job titles and number of employees was reported by all businesses and agencies supplying farmers with production needs, also, by those processing and marketing farm production.

15) Almost without exception, employers expressed a need for trained workers, placing a premium upon education, training, and skill. Significant emphasis was placed upon occupational training obtained prior to job entry.

Conclusions

A survey of the seven metropolitan areas of the State clearly shows how science and technology have combined to create new fields of employment in agriculture. It is true that a host of jobs once open to youth have been eliminated from farm work, yet applications of research findings and automation have resulted in entirely new occupational fields where job opportunities exceed those liberated from the farm.

The real significance of the movement lies in the contrast between jobs lost and those gained: jobs lost long served as the labor market for many untrained farm youth, or those with limited ambitions; while jobs emerging in off-the-farm agriculture demand a rising level of education, training, and skill---they offer no real opportunities for the untrained, or the unskilled, if pay is a consideration. Paralleling the loss of the farm as a haven for youth unwilling or unable to prepare themselves for work elsewhere, are the thousands of job opportunities existing in businesses, public facilities, and firms that deal directly with the farmer and those who ultimately consume his products.

The entire agricultural complex in the metropolitan areas of Louisiana employed 30,300 people, of which a substantial portion, 9,087, were required to have functional knowledge and skill in agricultural subjects, gained prior to job entry or by means of on the job training. For them, agricultural education is a continuing process, just as it is for the farmer. It is a labor market in which the untrained is unable to compete.

Farm youth, largely because of their work experiences at home, have a "natural" advantage for gainful employment in any segment of the agricultural complex providing they have the interest, the willingness to work, and the necessary educational and training opportunities are made available to them.

How to make rural youth employable by education and training prior to job entrance poses a vital problem to school people, since the evidence assembled here "points up" tremendous employment opportunities for persons trained in agricultural occupations.

The evidence also identifies "families of occupations" as well as specific jobs dealing with agricultural processes---in short, it discretely

describes areas where occupational training and employment opportunities exist, and if full benefit is to be derived from programs in vocational agriculture then efforts must be made to gear instruction to the needs of the areas defined.

In this search towards making vocational agriculture more meaningful to rural youth in relation to job preparation, it is felt that school recognition and emphasis upon the following factual evidence will improve the process of making rural youth employable.

1) **Many rural boys will not find their life's work on the farm---they will not even live out their lives in rural areas, but will look to urban centers for living and work. For them, occupational aspirations and job selection is critical, inasmuch as many face employment problems directly after high school graduation. The decline in farming opportunities is well known to them, yet they are unaware of the job opportunities in urban agriculture where their early experiences on the farm give job aid---far too many of them try for jobs outside the agricultural field where competition is the strongest.**
2) **Louisiana is now an urban state---over 50 per cent of the people live in it's seven major metropolitan areas, and these areas continue to grow, while some sections of the state decline in population. Actually, the difference between rural and urban living is narrowing, as more people commute to work from country to city.**

Farms are becoming fewer but larger and more highly specialized, with many traditional activities once performed on the farm now moving to town and city to be concentrated in the form of businesses engaged in processing and marketing farm products, along with servicing the production needs of farmers. This growth

is intimately associated with the farm and continued high production levels, yet it saps rural areas of growth potential, both in people and raw products. Consequently, rural schools frequently serve youth whose career needs are pitched to urban living. In contrast, the same schools will at the same time serve those who will farm or enter rural occupations---it follows that schools must educate for both into and out of the local community.

3) The agricultural complex in each of the Louisiana metropolitan areas contained an "open range" of different jobs in many occupational fields. Roughly, one third of all the workers in the seven cities were required to have a knowledge and skill in agricultural subjects, ranging in depth from what is required for low level skills to what is expected of professional workers.

Varying levels of educational achievement obtained prior to job entry are in demand throughout the entire agricultural complex: the college graduate with a professional degree, the college graduate with an agricultural specialty; the graduate of a vocational or technical school; and the high school graduate, with training in agriculture. The great number and wide variety of jobs offer the prospective worker considerable latitude for testing his interests and making a job selection.

Professionals, managers, and supervisors made up over 25 per cent of the total employees, taking into account all workers at these levels in the areas surveyed. These levels contain the "thinkers and organizers" of urban agriculture, and collectively offer the most promise for satisfactory employment. They direct the work of the other 75 per cent---those who perform technical, clerical, sales, and operative functions. A college degree, or years of satisfactory experience, was more often the difference between the two groups.

4) Agriculture in the metropolitan areas of Louisiana is a growing segment of the economy as evidenced by both an increase in number of employees and job titles.

A prospective employee should choose an occupational area (family) according to his interests and abilities; considering his experiences, achievements, and what additionally may be required of him to qualify. The school and parent should enter the picture before a final choice is made; afterwards, a decision must be made as to employment level desired, along with the type of job.

More than 1,500 job titles beckon to qualified and interested persons, a figure that will advance steadily in the years ahead. All of these jobs have "personalities"---they differ in training requirements, in work involved, in pay to the holder, and in opportunities offered for advancement.

Remuneration in all occupational families at all levels of employment was found commensurate with training and work performed ---jobs at the professional and management levels demand more training, but they paid more and therefore permit holders to live on a higher social scale. In contrast, jobs at the semi-skilled and unskilled levels paid much less and offer little chance for advancement, moreover, their holders live at a much lower social level.

5) Generally, applicants for work in urban agriculture having a high school education and some agricultural knowledge and experience in agriculture are considered employable. Those with a

farm residential background and some post high school training, gained in either a trade school, a technical school, or in a college, are preferable. Successful applicants to jobs considered professional must have a college degree, a qualification considered a minimum requirement in many other areas of employment. Regardless of employee status, continuous training is expected in all sectors of urban agriculture, either in firm or industry schools, on the job training, or in programs offered at the secondary school or college levels.

Recommendations

The rural high school must anticipate change, if it is to remain functional in the lives of people---in general, it must periodically adjust to at least two kinds of changes: economic and sociological. Mainly, adjustments are made by means of new programs based upon factors and forces which affect the future of youth.

The traditional function of the Louisiana rural high school is to provide schooling---schooling at the elementary, high school and college preparatory levels. Besides, in most instances, vocational agriculture is offered for preparing boys to farm locally.

The "encouragement" to provide vocational agriculture comes from the community. It has been fairly easy for those closely associated with farming to see the practical value of agricultural training---the farmers even participate, attending adult farmer classes. Unfortunately, the lack of resources prevent the development of more complete vocational programs, a condition not considered a handicap until recently, because farming and other community occupations absorbed the majority of youth.

Vocational agriculture has been successful, owing to a specific aim: the preparation of farm boys for useful employment on the farm, usually the home farm. It has served two distinct groups of people---those already on the farm, and those preparing to farm. Without question, it will continue to be a substantial and influential industry in the state, yet educators must recognize that agriculture is a part of a society in which occupational structure is rapidly changing. Entirely new concepts of training programs become necessary as some occupations expand, while others disappear or become more restricted and distinct.

Generally, two basic movements are afoot in agriculture, causing a combination of factors and forces greatly affecting job opportunities for rural youth: 1) continually rising productivity and efficiency on farms result in fewer farms operated with less labor---over the nation 2,000,000 people have left the farm each year during the past decade; and 2) the farmer's "twin" brothers have carried their agricultural business, agricultural industry, agricultural professions, and agricultural services---their workers outnumbering those employed by their brother, the farmer.

Despite the "bad" image given to agricultural occupations by national publicity, there is no decline in job opportunities. In fact, opportunities outstrip training resources. Emerging jobs and the increasing importance of existing ones demand a rising level of competency for prospective workers. Actually, agricultural education is on the threshold of a period of great growth and progress.

The strength of agriculture is dependent upon individuals who are competent to fulfill its occupations, whether on the farm or in the town or city. Both farm and nonfarm agricultural sectors have limited resources for training workers. They must look to the schools and more directly to the high school to provide pre-employment education, all the way from training in job literacy to education in science and technology; the more advanced the skill, the more training the schools must provide. This expectancy coincides with the interests of youth who not only wish to prepare for an occupation while in high school, but also expect to qualify for the next role in life.

Today, there are some 300 high schools in Louisiana offering vocational agriculture. Each faces the same dilemma that has confronted every agricultural instructor and high school principal since the opening of the first door, "What shall the program include to fully meet the needs of students?" Interest in the subject is perhaps greater than ever before, larger because of its increasing complexity---the main problem now is how to develop programs broad enough and to assemble sufficient resources to make it functional in the lives of students.

Rural youth, over the past decade at least, have not benefitted fully from occupational opportunities available to them in agriculture. They simply have needed training beyond that offered in vocational agriculture. Broadening the program will unlock not one occupational opportunity but many. Thousands of jobs were identified in the state's metropolitan areas ---training is the missing link between many of these jobs and as many rural youth.

If vocational agriculture programs are to achieve their full potential as a factor in Louisiana education, then several axioms, in the opinion of the researchers supported by factual evidence, must be acted upon:

1. THE BASIC PURPOSE OF THE TRAINING SHOULD BE CHANGED —— Occupational opportunities for agricultural trained persons extend throughout the broad confines of the State's metropolitan areas, showing that agriculture is much more than farm production, involving thousands of workers who furnish supplies and services to farmers and who transport, process, and market farm products over the state and nation.

Vocational agriculture, to be functional, must continue training for proficiency in farming, but changing demands have created a need for emphasis upon training individuals for employment in the total industry of agriculture.

Vocational agriculture classes in high school, supported by appropriate work experiences, must assume a duel role: 1) develop competencies required to make a beginning and advance in farming, and 2) develop competencies needed to enter and advance in nonfarm occupations in which agricultural knowledge and skills are required.

2. THE TRAINING SHOULD BE EXTENDED TO MORE PEOPLE —— Training in vocational agriculture is generally restricted to the rural areas of the State. Relatively few boys attending urban schools have an opportunity to enroll, yet many of them reside in rural or semi-rural communities and can profit by the training.

Research, nationwide in scope shows that many urban boys enter nonfarm agricultural occupations, usually because of family financial interests or interest aroused from first hand contacts with some phase of nonfarm agriculture. They, too, have a right to prepare for the occupation of their choice while in high school.

Under provisions of the 1963 federal legislation, training should be expanded to include all persons having an occupational objective in agriculture, providing there is reasonable expectancy for a job, or where re-training is required for job advancement.

3. THE TRAINING SHOULD BE GEARED TO THE LABOR MARKET —— The benefits derived from vocational agriculture in a locality or the state will be in direct ratio to the degree to which the program is geared to the needs of the area served.

In planning the training program mobility of trainees must be taken into account. Prospective workers under present day conditions often move to areas where employment opportunities exist; hence, the requirements of the state labor market must be known, along with the local situation, if the training is to be fully functional. The metropolitan areas have jobs, while rural areas have prospective workers---the problem is to bring the two together.

4. **THE TRAINING SHOULD BE BASED UPON THE AGRICULTURAL SCIENCES** --- The very nature of modern agriculture calls for student experiences in the sciences that involve animals, plants, the soil, and mechanics; also, the interrelationship that exists between the sciences, whether for production or processing purposes, focuses emphasis upon management.

   It is now evident that increasing emphasis will be placed upon building training programs based upon detailed job descriptions, "mixing" such training with other school offerings according to the demands of the job.

5. **THE TRAINING SHOULD BE A PART OF THE TOTAL SCHOOL PROGRAM** --- Vocational agriculture must not be regarded as something apart from the total high school program. It can not take the part of general education, nor can it function alone---it must supplement and enhance the program in general education for those who are preparing to enter agricultural jobs. Employers demand first a well educated person and second a person trained for an occupation.

   Vocational agriculture serves to enrich the high school program, not parallel it as a separate entity.

6. **THE TRAINING SHOULD BE IN COOPERATION WITH OTHER SCHOOL SERVICES** --- Vocational agriculture must function within an overall program of

vocational education, since students require knowledge and skill in both agriculture and business---even in industrial skills, rather than a single set of skills related more directly to farming.

Any number of traditional school services, both vocational and academic, may contribute necessary knowledge and skills. Special classes encompassing parts of other school services, such as office occupations, should be developed to supplement agricultural training, if it is to be fully effective.

7. **THE TRAINING MUST INCLUDE WORK EXPERIENCES** —— To insure employability and effective job performance, students must be given an opportunity to perform in a job situation.

Students with well-developed farming goals should be placed in a position to gain production and managerial experiences on the home farm. For the student who is preparing for a nonfarm agricultural occupation, the cooperation of nearby agricultural businesses and agencies must be obtained to provide on-the-job training, under the supervision of school officials.

Encouragement should be extended to the movement now popular in many states towards developing land laboratories for use in cooperation with other school science programs to serve students with demonstration projects; besides giving agricultural students experiences in selected areas of agriculture, such as landscaping, greenhouse operations, and agriculture.

8. **THE TRAINING SHOULD INCLUDE A REVIEW OF THE WORK WORLD** —— Rural youth face a world of promise and challenge, yet they must enter it better prepared than the generations before them. Many lack an understanding of the work world and the preparation it requires, especially

in the field of agriculture. They need a much broader concept of agriculture and agricultural occupations; embracing agricultural production, agricultural businesses and industries, and public agencies.

Many factors enter into youth's choice of a career: his interests, his ambitions, his abilities, the counsel he receives from teachers, friends and family. But, most of all, he must depend upon his training and experiences; hence, young men who choose to leave the farm must gain comprehensive information about other agricultural occupations, before they can wisely establish a training objective.

9. THE TRAINING SHOULD PREPARE FOR CONTINUING EDUCATION —— It should be the aim of vocational agriculture to let no full-time student graduate without reasonable preparation for what he will do next. In this connection, the service performs a prime function by early identification of the technically or professionally talented student.

Students interested in agricultural employment at the technical level must pursue training beyond high school, either in a technical school or in a junior college, while those desiring work at the professional level must complete a college course.

The large numbers of workers serving at the technical and professional levels in Louisiana metropolitan areas is clear evidence for guiding schools in making a determination as to where to place emphasis in vocational agriculture.

The high school is not terminal education, even though the student may not attend college or even any school of post high school level. Today's living requires a worker to remain a student all his life if he wants to stay employable. Actually, high school graduation shifts to the individual the burden of pursuing his own education.

10. **THE TRAINING SHOULD INCLUDE FOLLOW-UP** —— The chief responsibility of vocational agriculture is to provide occupational training, yet the service must not limit its functions to only training. Training effectiveness depends upon periodic analysis of jobs and job opportunities, plus the wise selection of trainees and counseling.

In the areas of job identification and job placements, the Division of Employment Security is in a position to extend material aid.

Every school with vocational agriculture should maintain up-to-date employment information on former students. A high school diploma in no way serves as a "ticket" for a job. Students need help in selecting an occupation, in preparing for a job, and finally in securing employment. Follow-up information is a requisite for a sound counseling service.

11. **THE TRAINING SHOULD BE EXTENDED TO COMPREHENSIVE HIGH SCHOOLS AND AREA VOCATIONAL SCHOOLS** —— As rural Louisiana continues to lose population, it will become increasingly difficult for rural communities to improve training programs in vocational agriculture. Trouble usually appears in the form of low enrollment, a decline of interest in agriculture, and weakened resources. The smaller the school the more difficulty is experienced.

The comprehensive high school, with its superior resources, can provide broad general education for all youth, together with more specialized training for each youth which will best serve his interests and needs.

Urban schools are particularly fitted to provide training in agriculture, according to the needs of agricultural business and industry in the area served. Moreover, urban schools can more easily assemble facilities and equipment for teaching purposes that are used in the occupation itself.

The real advantage of the comprehensive or area vocational school lies in superior resources available for providing students with pre-job experiences, which are necessary to early identification of occupational interests and talents.

12. **THE TRAINING SHOULD BE PERIODICALLY EVALUATED** —— The training program should be geared to the entire agricultural labor market, both immediate and future, on community, area and state bases. To insure consideration of only live labor market information, there must be effective coordination between the counseling services of the school and the employment services.

Special emphasis must be placed upon periodic evaluation of program goals and progress, in terms of success in fulfilling labor market needs and the needs of all groups in the community.

Research and development programs must be undertaken at all levels of educational endeavor, showing effective ways to meet human needs for work in the total agricultural complex, rather than restricting the training to a few specific occupational categories.

APPENDIX A

NONFARM AGRICULTURAL BUSINESSES AND AGENCIES COOPERATING IN THE SURVEY

Alexandria

Scott-Rabalias International, Inc.
Shadow, P. A. Jr., Tractor Co.
Andries Tractor & Equipment
Voelker, E. S. Co., Inc.
Swanson Dairy Farm (Surge)
Sears Roebuck & Co.
Morgan & Lindsey Co.
Cade Export Co., Inc.
Rapides Drug Co., Ltd.
Arkansas Oak Flooring Co.
Morgan & Lindsey Co.
Carroll Lumber Co., Inc.
Central Lumber Co.
Alexandria Seed Co., Inc.
Louisiana Agricultural Cooperatives
Blake, Robert E. Hardwoods, Inc.
Hodges Feed & Supply Co.
Louisiana Limestone Distributor
Tarver, Hugh C. Jr., & Associates
Petrus Feedmill
Lone Star Feed Mill
Roy O. Martin Lumber Co., Inc.
Bayou Roberts, Coop., Inc.
Red Barn Chemical Co.
Eldridge, G. W. Jr., Lumber Co.
Standard Lumber Co.
Lewis Vernon Lumber Co.
Roberts, N. O. Lumber Co.
Louisiana Seed Co., Inc.
Kellogg, L. O. Lumber Co., Inc.
Alexandria Fence Co.
Louisiana Wholesale Distributors
DeSelle, L. E. & Co., Inc.
Richey Bros. Lumber & Supply, Inc.
Pineville Seed & Feed Store
Couvillion, H. L., Building Materials
Hill-Harris & Co.
Tioga Building Supply
Handy Man Stores
Palfrey, Henry W., Inc.
Jones, J. R. & Sons
Kress, S. H. & Co.
Montgomery Ward & Co.
Miller's Hardware & Saw Co.
Louisiana Wildlife & Fisheries Commission
Hayes Manufacturing Co.
Central Louisiana Electric Co., Inc.
Bruce Terminex Service
Adams Pest Control, Inc.

Chambees, James N.
Carbo Foundry & Machine Co.
Orkin Exterminating Co., Inc.
White, Charles N. Realtor-Builder
Ruston Foundary & Machine Shop
Central Culvert Corporation
Ready Mix Concrete Co., Kojis, R. J.
Wolf & Wasson, Real Estate & Builders
Brown, Joe D.
Hathorn Manufacturing Co.
Semple Machine Shop
Alexandria Flying Service
Webb, W. C.
Alexandria Welding & Press Co.
Louisiana Division of Milk Testing
Central Louisiana Artificial Breeding Circuit
Rapides Farm Bureau
Plant Pest Control Division (USDA)
Green, Earl D. Water Well
Water Shed Conservation Office
Agricultural Stabilization & Conservation Service
Soil Conservation Service
Ellzey, W. F., Agriculture Teacher
Rodriquez, Dr. E. F., Veterinarian
Burton, H. A., Veterinarian
Paige Veterinarian Hospital
Vocational Rehabilitation
Alexandria Animal Clinic
Louisiana Dept. of Agricultural State Market Commission
Hester, L. O., Agriculture Teacher
State Agricultural Dept.
Security National Bank
Guaranty Bank & Trust Co.
Rapides Bank & Trust Co.
Chandler, Neil R., Wholesale Lumber
Pineville Lumber Co.
Petrus Feed & Seed Store
Williams Nursery
Henry, L. B., Plumbing & Well Drilling
Blair, C. R. Laboratory
Farmers Home Administration
State Farm Insurance
Gehr, M. C.
Hodges, W. H. & Co., Inc.
J. M. Poultry Packing Co., Inc.
Magnolia Park Farm & Produce Co.
Red River Egg Co., Inc.
The Borden Co.
Armour & Co.
Rapides Packing Co.
Duncan, W. A.
Texada-Bailey Co., Inc.
Red River Egg Co., Inc.
College Park Grocery
Cudahy Packing Plant

Walker Farms
Mid-West Dairy Products
Louisiana Poultry By-Products Co.
Cash Poultry & Egg Co.
Arthur Lacy Barn
Dominiques Livestock Auction
Swift & Co.
International Paper Co.
Clayton Anderson Cotton Co.
Cotton Growers Gin Co., Inc.
Independent Gin & Mill
Colfax Creosoting Co.
Cotton Division - Agricultural Market Service (USDA)
Southern Forestry Experiment Station
Daminco's Fruit Stand
Cobb, Howell C.
Jacks
Ralph's Fruit Market
Forest Service
Earnhard Tree Surgeon
Alexandria Fruit Co.
Louisiana Forestry Commission
Red River Cotton Products Co.
Young, Robert E., Nursery
Adams Nursery
Blum, Fred E. & Son Nursery
E. & E. Nursery
Chamberlain's Nursery
Harold Poole Nursery
Richards Nursery
Purkey Nursery & Landscape Service
Poole Brothers Nursery
Alexandria Tomato & Produce Co.
John Boogaerts
Haley's Nursery

Baton Rouge

Breeden Tractor & Implement Co.
Talbot Tractor Co.
Toups Truck & Tractor Service
Dealers Truck & Equipment Co., Inc.
Olinde's Hardware & Supply Co.
Averette's Tobia Gass Co.
Scott Fence & Insulation Co., Inc.
Montgomery Ward & Co.
Reeve's Grocery & Hardware
Lehmann's Seed Store
Louisiana Agricultural Cooperatives, Inc.
Ascension Cooperative
Godeau-Huey Hardware & Paint Co.
Goudeau, J. H. Store
McIntyre Veneer Co., Inc.
National Food Store
Gonzales Truckers, Inc.

Progressive Stores, Inc.
T. G. & Y. Stores
Tri-Parish Cooperative
Construction Materials, Inc.
Kelly Feed & Seed
Kalmbach-Burckett Co., Inc.
Cox Bros. Hardware & Supply
Rainbow Feed & Seed Store
Hagan Fence Co.
Dayton Fence Co.
Ace Hardware
Chenevert Hardware
Sears Roebuck & Co.
Mack's Hardware
Dave's Hardware
Erickson Hardware
Highland Road Hardware & Garden Center
Live Oak Hardware & Supply
McCrory's
Naylor Bros. Feed - Seed & Hardware
Ace Hardware
Kleinpeter's Farms Dairy
Stephens Meat Co.
Tall Pines Egg Co.
Manda Bros. Provision Co.
Old South Packing Co.
Swift & Co.
Ready Portion Meat Co., Inc.
Dominique's Stockyards, Inc.
Dixie Broilers, Inc.
Brown-Allsbrook Stockyards, Inc.
The Borden Co.
National Dairy Products Corp.
Imperial Poultry
Smiley's Meat Market
Christianna Bros.
H & S Packing Co.
Millwood Packing Co.
Lily Milk Products
Louisiana Forestry Commission
Cargill, Inc.
Cinclare Central Factory
Gonzales Products Co.
Poplar Grove Planting & Refining Co., Inc.
Princeville Canning Co.
Fruit Exchange, Inc.
Capital City Produce
O'Brein Tree Service
A-1 Tree Company & Service
Borskey, J. C. Tree Service
Tripple A Tree Service
Granberry Wholesale Florist
Louise's Flower Shop
Heroman Florist
Chapin & Associates

Pelican State Nursery
Russell's Florist
Billeann's Flowers
Don Lyn Florist
Charlie's Nursery & Landscape Service
Cora's Florist, Inc.
Capital Garden Center
Hunter, J. W., Landscape Contractor
Carriage Trade Florist
Clegg's Nursery
Crawford Wholesale Florist & Supply
Hart Landscape Co.
Magnolia State Nursery
Flowers Styled by Jim
Bob Hawkins Flowers
Billy's Flowerland
House of Flowers
Verbie's Flower Shop
Daigre Flower Shop
Hunt's Florist
Arbour's Forget Me Not Florist
Fred's Flower Shop & Nursery
Delmont Florist & Nursery
State Park & Recreation Commission
Fontane Stables
Deep South Taxidermy
Buquoi Taxidermy Service
Lazy D Stables
Golf Forest
SPCA Association
Falcon Termite Control Co.
Southern Terminix Co.
Naylor Bros. Feed-Seed & Hardware
Rebel Pest Control Co.
Morganza, Dr. M. (Research Consultant)
Livestock Branding Commission
Williams, Kirmit Realty
Willie & Willie Building Contractors
Jenco Products Co.
Dixie Electric Membership Corp.
WBRZ Television Station
A & B Termite Control Co.
Lett, Charlie
Vitality Food Shoppe
Orbit Exterminating Co.
Allied Pest Control, Inc.
William, L. Owens Lab. Inc.
Louisiana Termite Control
Lema B. Sims, Real Estate Agency
Farmers Home Administration
Orkin Exterminating Co., Inc.
Soil Conservation Service
State Dept. of Agriculture
Agricultural Stabilization & Conservation Service
Baton Rouge Animal Hospital

Tom Brantley, Agriculture Teacher
Louisiana State Market Commission
State Dept. of Education, Vocational Agriculture Section
Choctaw Drive Animal Hospital
Animal Center
Flowers, C. L., County Agent
Denham Springs Animal Hospital
U. S. Agriculture Marketing Service
U. S. Dept. of Agriculture
Heflin & Cooper Veterinarian
Animal Ark Pet Clinic
West Side Animal Clinic
Perkins Road Veterinarian Hospital
Helouin's Veterinarian Hospital
Granzin Veterinarian Clinic
Animal Disease Eradication USDA
American Bank & Trust Co.
Louisiana National Bank
State Land Office
Bank of West Baton Rouge
Baker Bank & Trust Co.

Lafayette

Farm-Oil Truck & Tractor, Inc.
Hub City Tractor, Inc.
Western Auto Assoc. Stores
Melancon Implement Co., Inc.
Service Chevrolet, Inc.
Chastant Bros. Feed Store
Ben's Auto & Home Supplies
Whittenberg Feedmobile
Wayne Distributing Co.
Lafayette Farmers Coop.
Bartlett Chemicals, Inc.
Landry Fence Co.
Dupuis, Christopher Grocery & Feed
Montgomery Ward & Co.
Broussard Feed & Garden Center
Happy Feed & Seed Store
Howard J. Comeaux Feed & Seed Store
Bolis Farm & Garden Supply
Scott Fence Co.
Sears Roebuck & Co.
Louisiana Agricultural Cooperative
L. A. Frey & Sons, Inc.
Begnaud's Uneeda Butcher
Duhon Henning Market & Slaughter House
Guilbeau Slaughter House
LeBouef & Trahan Meat Market
Savoy & Broussard Slaughter House
Romero Egg Co.
Percy Guidry Meat Market
Percy Guidry Slaughter House
Southwest La. Pure Milk Producers Assoc.

Pelican Creamery
Herberts Creamery
Martin's Slaughter House
Courville Slaughter House
Swift & Co.
La. Maid Dairy Products
Prejean Wholesale Meat
Broussard Wholesale Meat
Dominique's Stock Yard
The Borden Co.
Pierre Lablanc Farm
Billeaud Sugar Factory
Cotton Products Co.
Cotton Products Co.
Cotton Products Co.
Cotton Products Co.
Trappeys, B. F. & Sons, Inc.
Sealtest Foods Co.
Breaux Bridge Sugar Cooperative
National Food Stores of La., Inc.
Winn Dixie Food Store
Winn Dixie Food Store
Cotton Products Co.
Varisco, Pete Wholesale Fruit Produce
Petro's Super Market
A & P Food Store
A & P Food Store
Pinhook Fruit Ranch & Seafood
Lafayette Rice & Feed Mills, Inc.
Farmer's Gin, Inc.
National Food Store of La. Inc.
Brown's Thrift City
National Food Store of La. Inc.
Boustays Super Market
Lafayette Fruit Co.
Heyman Feed Center
Dugal's Nursery Center
Lafayette Nursery Sales
Kents Nursery
Henderson's Nurseries
Grandview Nursery
Stoutes Nursery Retail
Simon, C. G. Nursery, Inc.
Cash & Carry Flowers
Orchid Gardens
Dugals Nursery Center
Broussard, Joe A. Sr., Fernery & Greenhouse
Holiday Nursery Sales
Lafayette Playgrounds & Park Commission
Oakbroune Country Club, Inc.
Acadian Hills Golf Club
Max Willingham Horticulture Service
Welding Truck & Auto
Percy Guidry Welding
Slemco

Nolan Guidry Repairs
Oil Center Machine Co.
Henderson's Tree Removal & Surgery
Gulf States Utilities Co.
Orkin Exterminating Co.
Lafayette Artificial Breeding
Dixie Spraying Service
Soil Conservation Service
American Bank
First National Bank
Guaranty Bank & Trust Co.
Lacour & Wall Veterinary Clinic
Lafayette Animal Hospital
Elsten Animal Hospital
Martin Veterinary Service
Agricultural Stabilization & Conservation Service

Lake Charles

Calcam Tractor & Equipment Co., Inc.
Neal Equipment Co., Inc.
Kemmerly, C. E. & Sons, Inc.
Southwest Implement Co., Inc.
Natali-LeJeune Implement Co.
Morgan, A. T. Crop Service
The Cowboy Store
Lake Charles Grain & Grocery Co. (Best-Bet)
Lake Charles Grain & Grocery Co. (Fertilizer)
Lake Charles Grain & Grocery Co.
Woolworth, F. W. & Co.
Hercules Lifetime Fence Co.
Kress, S. H. & Co.
Sulphur Fence Co. (Allied)
Morgan & Lindsey, Inc.
King's Seed Store, Inc.
Kelly-Weber & CO., Inc.
Sears Roebuck & Co. Farm Store
McCall's Farm Supply, Inc.
Norwood Lumber & Hardware Co.
Reeves Lumber Co.
Gulf Lumber & Hardware
Lake Charles Lumber Co., Inc.
Harless, Inc. (Calcasieu Bldg. Mat.)
Builders Supply Co.
Krause & Managan, Inc.
La. Western Lumber Co., Inc.
Home Bldg. Materials
Managan & Carroll Bldg. Mat., Inc.
Quality Bldg. Supplies
South St. Lumber Co.
Vermillion Creamery
Swift Packing Co.
Micelle's Commission Yard
Montgomery's Farm & Hatchery
Leading Dairy

Micelle, John Meat Packers
Guth Dairy, Inc.
The Borden Co.
Lake Charles Livestock Commission
Better Homes Tree Service
Stedman Wholesale Distributors, Inc.
Cotton Compress & Warehouse
Edgewood Land & Logging Co., Ltd.
Green Gate Garden Center, Inc.
Vallot's Nursery
Pronia's Floral Garden
Romero Greenhouse & Nursery
Duggans Greenhouse & Nursery
Enco Exterminators & Nursery
Reeves Garden Center
Kayouchee Coulee Golf Club
Sam Houston State Park
Lake Charles Golf & Country Club
La. Flyer Inc.
Doucets Blacksmith & Welding Shop
Coleman Agency
Guillory Real Estate
Bennett Pest Control
Iles Real Estate
Orkin Exterminating Co., Inc.
Alamo Insect Control
Bruce Terminix Co.
McKinzie Pest Control
Evangeline Iron Works, Ltd.
LeBouef Welding Service
Atlas Welding & Machine Works
Central Machine & Welding Works, Inc.
Better Pest Control
Landry, Pete Welding Shop
La. Farm Bureau
Howell Realty Co.
Dixie Exterminating Co., Inc.
Sweet Lake Land & Oil Co., Inc.
Jennings Production Co.
Martin Water Well Service
Broussard Blacksmith
Layne-Louisiana Co.
Gulf Machine Shop
Myrick Water Well Service
Farmers Home Administration
Arnold's Animal Hospital
Agricultural Stablization & Conservation Service
Dalovisio Veterinary Clinic
Bruce & Vincent Vet. Hospital
Jolly Animal Clinic
Morris Animal Hospital
McNeese State College, Ag. Dept.
Agricultural Extension Service
Quilty - Smythe Veterinary Clinic

Monroe

Jones Tractor Co.
Automation Equipment Co.
Farm Implement and Industrial Equipment Co.
Farmar Bros. (Dodge)
Southern Equipment & Tractor Co., Inc.
West Monroe Tractor Co.
Adair G.M.C. Inc.
Scott Tractor & Equipment Co.
Contractors Equipment Co. Inc.
Brown-Rivers-Scogin, Inc.
Gregg Implement Co.
Superior Lumber Co., Inc.
Pickens Welding Service
West Feed Mills, Inc.
Cattlemans' Equipment & Vet. Supply
Tri-State Veterinary Supplies
Sears Roebuck & Co.
Montgomery Ward & Co.
Tyner-Petrus Co.
Cotton States Chemical Co., Inc.
Red Barn Chemical, Inc.
Farm Chemical Service, Inc.
Weaks Supply Co., Ltd.
Monroe Bearing & Supply Co.
Tom Sanders Bldg. Mart
McCoy, J. B. Lumber Co., Inc.
Forest Chemical & Supply Co., Inc.
Lane Wilson Seed Co.
Green, W. E. & Co.
Tyner-Petrus Co.
Royal Feed & Seed Store
Barkers Your Family Discount Store
Carter's Feed & Seed
Farmer's Seed & Feed
Gibson's Wholesale Co.
The Borden Co.
Foremost Dairies, Inc.
West Monroe Rendering Plant
The Merchants Co.
McCormick's Poultry & Egg Mkt.
Wade Meat Co.
West Monroe Livestock Auction, Inc.
Monroe Packing Co.
Clover Leaf Dairy Products, Inc.
Swift & Co.
Cloyd's Packing Co.
Green Bros. Dairy
Louisiana Forestry Commission
Union Oil Mill, Inc.
Simonton Grain Co.
Wilds-Russell Pulpwood Dealers
Lee's Curb Market
Vowell's Curb Market

Marks Cotton Co.
Nelson, W. B. Lumber Co.
Kellogg, Walter Lumber Co., Inc.
Piggly-Wiggly Food Stores
Bayles Fur & Pecan Co.
Albright Sawmill & Lumber Co.
Safeway Stores
Safeway Stores
Morgan & Lindsey, Inc.
Bosco Gin Co.
Federal Compress
Bagwell's Gardens
City of Monroe - Parks
Bayou Desiard Country Club
Highland Park Country Club
Mann Machine Works
Kelly's Welding & Mfg. Co.
F & N Water Well Co.
Dixie Water Wells
Tommie's Welding & Repair Shop
Twin City Welding & Machine Shop
Taylor's Welding & Auto Repair
Gore Pest Control & Termite Co.
Monroe Exterminating Co.
Louisiana Farmers Credit Bureau
Bruce-Terminix Service
Anti-Pest & Veitch, Inc.
Brooks Tree Service
Arrow Pest Control Co.
Mitchell's Welding & Marine Ways
Thompson's Tree Surgery
Johnstons Welding Works
L & F Welding & Press Service
Smith, Jack L. & Co., Inc.
Kirk, S. R. Repair Shop
Grayson Welding Service
Loper Machine Works
Tiger Machine Works
Orkin Exterminating Co., Inc.
Louisiana Machine Co.
James Machine Works, Inc.
Central Savings Bank & Trust Co.
Soil Conservation Service
Sterlington Bank
First National Bank of W. Monroe
Northeast La. State College, Ag. Dept.
L.S.U. Agri. Extension Service
Agricultural Stabilization & Conservation Service
De Kalb Agricultural Assoc., Inc.
Twin City Veterinary Hospital
Small Animal Clinic
Animal Hospital
North La. Experiment Station
Ouachita National Bank
Highland Veterinary Clinic

New Orleans

Lee's Tractor Co.
International Tractor Co.
Jefferson Feed Store
Laborde Fence Co.
Woolworth, F. W. & Co.
Logan Perkins, Ltd.
Gibbon's Race Track Feeds
B.B.B. Distributing Co., Inc.
Tony's Hardware, Lumber, & Feed
Pet Mart
Rose Garden Center
Dow Chemical Co.
Swift & Co., Agri. Chem. Div.
Airline Feed Store
McCrory's
Morgan & Lindsey, Inc.
Sears Roebuck & Co.
Circle F. Feed, Pet & Supply
Kress, S. H. & Co.
Armour Agri. Chem. Co.
Brisbi Fence Co.
P & L Fence Co.
Joe Feed Co., Inc.
Menge, Joseph A.
Richard's Variety Store
Scott Fence Co.
Southern Seed & Feed Co.
Chalmette Hardware & Appliances
Stauffer Chemical Co.
Mathews Feed Store
Florida Feed & Food Store
Thompson-Hayward Co.
Arrow Fence Co.
Lee's Tractor Co.
Winn Dixie Store
Mestayer, R. F. Dick Lbr. Co., Inc.
Weyerhauser Co. (Wood Pro. Div.)
Meadows Lumber Co., Inc.
Gueydan Lumber & Plywood, Inc.
Southport Lumber Co.
Volkert Lumber Export Co.
Robinson Lumber Co.
Liberty Lumber Yard, Inc.
Nursery Ave. Lumber Co., Inc.
Harang Lumber & Supply Co., Inc.
Feitel M. Hse. Wrecking Co., Inc.
Donigan Lumber Co., Inc.
W. H. Ward Lumber Co., Inc.
Temple Lumber Co.
W. Harvey Moynan Lumber Co.
Simger Lumber Co.
May Lumber Co., Inc.
Jules Lumber & Supply Co., Inc.
Cedar Lumber Co.

Hemelt Lumber Co.
Westwego Bldg. & Service Co., Inc.
Negrotto Lumber Co.
Nick Christiana
Sealtest Food, Div. of Nat'l Dairy Prod. Corp.
L. Frank & Co., Inc.
Cherry-Burell Corp.
The Borden Co.
Camarata, D. P. Inc.
Jager Stock Farm
Zeke's Poultry
Old South Dist. Co., Inc.
Four Star Meat Co.
Velva Dairy Products
Rab & Co.
Wholesale Market Warehouse
Vicking Packing Co.
Armour & Co.
Chisesi Bros.
Muller Bros. Creamery
Gulf Soap Corp.
Herman Egg & Poultry Processing
Certi-Fresh Egg Co., Inc.
Gold Seal Creamery, Inc.
Frank Fouchi & Son, Inc.
Schott Meat Packing Co., Inc.
Cudahy Packing Co.
Crown Packing Co.
Thompson Packers, Inc.
A-1 Meat Processing Co.
Eagle Packing Co.
Pico, John Machy & Supplies
Meibaum Bros., Inc.
Hormel, George A. & Co.
Brown's Velvet Dairy Products, Inc.
Bowen Packers
Rocheblave Processors
Hayes Dairy Products
Russel Ice Cream, Inc.
Bennie's Wholesale Meat & Provisions
United Poultry Mkt.
Walker Roemer Dairies, Inc.
Frey, L. A. & Sons, Inc.
Roger's Creamery
Crescent City Egg Co.
Goodman & Beer
Colomb, Charles L & Sons
Quality Portion Control Packing Co.
Southern Packers
Old Plantation
Kress-Dobkin Co., Inc.
Hodges Stockyard, Inc.
Pontchartrain Creamery
Riverbend Meat & Provision Co.
Grand Central Meat Mkt.

St. Ann's Chicken Hatchery
Bruno Bros.
Joseph A. Caravella
Mayer, Oscar & Co.
Jefferson Creamery
National Meat & Provisions Co., Inc.
V. Basha
Wilson & Co.
Market Place Produce Co.
Monteleone & Schenck, Inc.
National Wholesale Fruit & Produce Co.
Rice By-Products
Degelo's Bros. Grain Corp.
Tuminello Bros. Produce
Healy, Leslie J. & Co.
Fiesta Foods, Inc.
Rathborne Land & Lbr. Co., Inc.
Dixon & Tom-A-Toe, Inc.
Sciambia & Fletcher
Commodity Exchange Authority
Bolner Fiesta Products Co.
J. Segari & Co. (Produce)
Valle & Sons Co.
Grundy Materials
Dash, Sam & Son, Lbr. & Bldg. Materials
Dittman, L. J. Coffee Co.
Wood Mosaic Industries, Inc.
Standard Fruit & Steamship Co.
C. B. Fox Co.
Guercio, R. & Son, Inc.
Lucas T. Cuccia & Sons, Produce
Cusimano Produce Co.
Dixie Tomatoe & Packaging, Inc.
L. Frank & Co., Inc.
Packaging Unlimited, Inc. (Produce)
Southern Forest Experiment Station
Agri. Market Service
United Fruit Co.
Panno & Sons, Inc.
United Fruit Co.
Poydras Fruit Co.
United Rive Milling Co.
Celcure Wood Preserving Corp. of La.
Plywoods, Inc.
Gaiennie Grain Co., Inc.
Continental Grain Co.
Heintz Produce Co.
Cargill, Inc.
Gene's Tree Service
Crescent Nursery Co.
Gina Nursery
Farley, E. A., Florist, Inc.
Little Hen Landscaping & Nursery, Inc.
Little Farms Nursery
Winling's Nursery

Juanita Gardening & Landscaping Service
Scheinuk Florist, Inc.
Kraaks Nursery & Flower Shop
Bud's Flower Shop
Peter A. Chopin, Jr.
Mobile Azelea Nursery
Sarcefield's Twin Oaks Nursery
Algiers Nursery
The Green Garden Center
R. F. Schneider Landscape Architect
Waguespack Nursery
Haydel's Flower Shop
Sporl's Nursery & Garden Center
Nola Nursery
Badinger's Nursery
Boswell's Nursery
Tetera's Nursery & Florist
White Rose Nursery
Talen's Nursery
Bergen & Friedrichs Landscape Architects
Perino's Nursery & Garden Center
Metairie Country Club
Audubon Park
City Park Golf Course
Parks & Parkways Commission
Pontchartrain Park Golf Course
Bunny Friend Playground
Chalmette National Historical Park
Seale Pest Control
Ted's Tree Service
LaBell Tree Service
Nolan Pest Control
B & B Exterminating Co.
ABC Pest Control Co.
Sure Fire Pest Control
Barber Insect Pest Control
Dillon Pest Control Service
Halvorson Tree Service
General Pest Control Service, Inc.
Custom Fogging Service, Inc.
Delta Pest Control, Inc.
Louisiana Power & Light Co.
A & M Pest Control Service, Inc.
Norris Pest Control Service, Inc.
Felix Bonura, Inc.
Ajax Pest & Termite Control
Delaune's Pest Control Service
Keystone Pest Control Co.
Vince's Pest Control
Swarmer Termite & Pest Control Co.
A-1 Pest Control Service
Metry Pest Control
Safeway Exterminating Corp.
Bruce Terminex Co.
Leonardi, L. P.

West Bank Pest Control
D. A. Pest Control Service
Armrich Co., Inc.
Southern Exterminating Co., Inc.
Orkin Exterminating Co., Inc.
Farmer's Home Administration
Agricultural Stabilization & Conservation Service
Federal Land Bank of New Orleans
Gentilly Vet. Hospital
Market News
Lemieux, Frank J.
U. S. Dept. of Agri. (Plant Quarantine Div.)
U. S. Dept. of Agri. (Fruit & Vegetable Inspection)
U. S. Dept. of Agri. (Research Service)
U. S. Dept. of Agri. (Grain Market)
Agricultural Research Service
Orleans Levee Board
Dougas, Frank J., Jr. (Veterinarian)
Southern Forest Experiment Station
Marketing Administration (USDA)
Black, J. J. Small Animal Hospital
New Orleans Small Animal Hospital
Brooks Animal Hospital
Dairy & Poultry Grading & Inspecting (USDA)
Darty Small Animal Hospital
Crescent Animal Clinic
Trocquet, Walter A. (Veterinarian)
Watts Veterinary Hospital
Thrasher's Small Animal Hospital
County Agents
Carrollton Veterinary Hospital
Broadmoor Animal Hospital
St. Bernard Bank & Trust Co.
Farm Credit Bank
Spindel, Dr. M. (Veterinarian)

Shreveport

Tri-State Tractor Co.
F & H Equipment Co.
Peerless Supply Co., Inc.
Poulan Saw Co.
Craig Equipment Co., Inc.
Wildbanks Implement Co., Inc. (L.C.Case)
J. B. Lee Tractor & Implement Co.
Gibbs Implement Co., Inc. (John Deere)
Peavy Beard Lumber Co.
Pelican Lumber & Supply Co.
Chilean Nitrate Sales Corp.
Patrick-Reed Lumber & Supply Co., Inc.
Turpin Builders Supply, Inc.
Tri-State Feed & Seed Co.
Anchor Fence Div., Anchor Post Products, Inc.
Reigel By-Products Co.
Hardtner Lumber & Supply Co., Inc.

Jordon River Co.
Hurricane Fence Co.
Tucker Lumber & Supply Co.
Planters Seed Co.
Brandon Fuel Service, Inc.
Morgan & Lindsey, Inc.
Weaver Lumber & Supply Co.
T. G. & Y. Stores
Lester Lumber & Supply Yard
Economy Lumber Co.
Gorman's Evergreen Feeds
Kalmbach-Burckett Grain & Seed Co.
The Patio Shop
Louzan Lumber & Supply Co.
Fuqua Lumber Co.
Trowbridge Lumber Co., Inc.
Swift & Co. (Agri-Chemical Div.)
Ralston Purina Co.
Sears Roebuck & Co.
American Fence Co.
Fielder's, L. L. Store
Red Barn Chemicals, Inc.
Caddo Lumber & Supply Co.
Teach's Anchor Serum Co.
Virginia Carolina Chemical Co.
Gamm, Julius Co., Inc.
Kress, S. H. & Co.
Bruce Terminix Service (Chemical)
Feeders Supply Co.
Morgan Lumber Co., Inc.
Dale Lumber Co.
Thompson-Hayward Chemical Co.
Bossier Lone Star Feed & Fertilizer Co.
Home Building Supply Co.
Caddo Hardware & Feed Co.
Hart Lumber Co.
Benton Long Leaf Lumber Co.
Clanton Lumber & Supply Co.
Associated Building Supply, Inc.
Custom Built Cabinet & Supply Co.
Shreveport Grain & Elevator Co.
Murrell, Tom Stables
Shreveport Packing Co., Inc.
Magnolia Meat Products
Britt Packing Co.
Foremost Dairies
Fulton Products Co.
Shreveport Rendering Co.
Midwest-Jersey Gold Creameries
Gerlach Whol. Meat Co., Inc.
Hormel, George A. & Co.
The Borden Co.
Lee's Poultry & Eggs
Tilsbury's Southern Meat Co., Inc.
Swift & Co. (Sales Unit)
Wilson & Co.

Fairview Farm Dairy
Clark Livestock Commission Co.
Hamel's Dairy, Inc.
Rite-Care Poultry Co., Inc.
Swift & Co. (Agri. Chem. Div.)
Dominique's Cow Palace
D. B. Distributing Co.
Houghton Wood Co., Inc.
Elm Grove Gin
Olin Mathieson Chemical Co.
AAA Tree Service
Washburn, T. L. Whol. Tomato Hse.
Morrison Tree Service
Hinton Whol. Produce Co.
Market Produce Co.
Harrison, R. D.
Ark-La-Tex Pre-Packing
Gould, H. R. & Co.
Fergeson Cotton Co.
Glassell Hicks Co., Inc.
Santa Maria Whol. Produce
Tri-State Whol. Produce
D'Anna Bros. Produce Co.
Little, Raymond
Wilson Cotton Brokerage
Myers Bros., Inc.
Grove Fruit Market
Knighton Fruit Co., Inc.
Shreveport Cotton Oil Mill, Inc.
Goeder's System Tree Surgeons
Lance, Inc.
International Paper Co.
Hendricks, W. H.
Louisiana Forestry Commission
Paymaster Oil Mill Co.
Friorson Gin
American Compress Warehouse
Cargill, Inc.
Fulton Produce
Crosby Food Broker
Marlowe Food Broker
Beene Plantation Co.
Bolinger Lumber & Supply Co., Inc.
Monkhouse Florist
Bossier Garden Center
Johnson Flower Shop & Greenhouse
Shreveport Flower Shop
Begbie Florist
Garrison's Greenwood Garden
Dance's Florist
Griffith's Nursery
Chapman's Nursery
Lambert Landscape Co.
Manhein Florist
Emmons Garden Center

Akins Nursery & Landscape Co.
Morrison City Flower Shop
Dixieland Nursery & Garden Center
Godfrey Landscape Construction
Wilkes, George G. Jr., & Associates
Ray Williams Blossom Shop
Lambright Nursery
Art Floral Shop & Greenhouse
Buddy Liles, Florist
Don and Bill's Flowers - Gifts
Pierremont Florist, Inc.
Southgate Garden Center
Crosslake Gardens
Meadowlake Golf Club
Shreveport Country Club
Querbes, Andrew Golf Course
Production Credit Association
Farmers Home Administration (USDA)
Farmers Home Administration
Radio Station - KEEL
Southwestern Electric Power Co.
Orkin Exterminating Co., Inc.
Teague's Blacksmith & Welding
Marak Realty Service
Grigsby, Frank W. Realtor
Anderson, Aubrey, Realtor & Bldr.
Bob White Realty Co.
DDT Spraying & Rodent Control Service
Sour, A. W. Realtor
Nor-Wes, Inc.
La. Grone D. X., Realtor
Brown-Bedingfield
Bossier Rural Electric Corp.
Jordan, O. L. - Realtor
Farm & Home Real Estate, Inc.
Anti-Pest Co., Inc.
Pilkinton Aero Farm Service
Ark-La-Tex Realty
Burton Realty Co.
International Exterminator Corp.
Scott Pest Control Service
Pest Aid Co., Inc.
Arrow Pest Control
Kem-Spray Pest Control
Matlock Exterminating Co.
Burmac Termite Control Service
Commercial National Bank
Mudd, Lee S., Forest Consultant
State Division of Milk Testing
Milk Market Administration (USDA)
Bossier Bank & Trust Co.
Louisiana Bank & Trust Co.
American Bank & Trust Co.
Federal Land Bank Assoc. of Shreveport
National Bank of Bossier City

First National Bank
Shreveport Bank & Trust Co.
Pioneer Bank & Trust Co.
Bango, Henry L., Forest Consultant
Red River Valley Agricultural Experiment Station
Agriculture & Immigration Div. (Entomology)
U. S. Air Force (SAC)
Agricultural Soil Conservation Service
Soil Conservation Service
Soil Conservation Service
Agricultural Stabilization & Conservation Service
La. Div. Employment Security Service
Federal & State Fruit & Vegetable Inspection Service
Linwood Animal Hospital
Glenn Veterinary Shop
Bryson Veterinary Hospital
Young's Veterinary Hospital
Caraway Veterinary Clinic
La. State Market Commission
State Department of Education
La. State Fair Association
Caddo Parish Agricultural Extension Service
Agurs Animal Clinic
USDA Pecan Field Lab.
White, E. M. Veterinary Hospital
Summer Grove Animal Hospital
Basco Animal Clinic
Bossier Animal Hospital
Veterinary Clinic
Davis Animal Hospital
McIntire Animal Hospital
Plant Pest Control Div. (USDA)
Dog & Cat Clinic
Par 3 Golf Course
Radio Station - KWKH
Bossier Parish Agricultural Extension Service

APPENDIX B

PERSONS CONDUCTING INTERVIEWS TO OBTAIN SURVEY DATA

Mr. Steven Carter, 2008 Shannow Road, Alexandria, La.
Mr. Edwin Gayle Dean, Jr., 413 Avoyelles Dr., Alexandria, La.
Mr. Raymond Adam Guidry, 1952 1/2 Monroe St., Alexandria, La.
Mr. Jess Willard Lundy, Box 444, Colfax, La.
Mrs. Mary R. McPherson, Rt. 1, Box 102, Pineville, La.
Mr. Sidney M. Wayne, 202 Reagan St., Pineville, La.
Mrs. Jeannette Davis, P. O. Box 582, Baton Rouge, La.
Mrs. Margaret Newson, 6973 N. Rothmer Dr., Baton Rouge, La.
Mrs. Clare Stockstill, 10319 Harvey, Baton Rouge, La.
Mrs. Buelah P. Theriot, 1981 Hood Ave., Baton Rouge, La.
Mrs. Zdenka Turk, 4275 Capitol Hts., Baton Rouge, La.
Mrs. Gracie Wiggins, 4340 Burgess Dr., Baker, La.
Mr. Philip G. Birdwell, 137 Frazer, Lake Charles, La.
Mrs. Juanita Duhon, Rt. 2, Box 115, Lake Charles, La.
Mr. Reinhold G. Grubb, 3613 McKinley St., Lake Charles, La.
Mrs. Almada Mueller, 309 W. Lee, Maplewood, La.
Mr. Walter E. Williams, 3449 Taylor Dr., Lake Charles, La.
Mrs. Dorothy M. Allen, 201 Vermilion Dr., Lafayette, La.
Mr. Terrance K. Benoit, 701 Parkview Dr., New Iberia, La.
Mrs. Emmadean Chauvin, 108 Essen Dr., Lafayette, La.
Mrs. Irene A. Hebert, P.O. Box 334, Abbeville, La.
Mr. Sam Kaplan, 134 Oak Crest Dr., Lafayette, La.
Mrs. Pauline T. Halbert, 405 Circle Dr., West Monroe, La.
Mrs. Gladys M. Hansen, 2112 Valencia, Monroe, La.
Mrs. Patricia E. McClendon, 1200A Hinkle Dr., West Monroe, La.
Mrs. Goldie H. Smith, 118 Riverbend Dr., West Monroe, La.
Mrs. Eva R. White, 204 Pershing, Monroe, La.
Mrs. Willie Mae White, 121 Pinewoods Dr., West Monroe, La.
Mr. William J. Donnelly, 6314 Fountainebleau Dr. New Orleans, La.
Mr. Stanley Najolia, 3521 Metairie Hts., Metairie, La.
Mr. J. N. Perrett, Jr., 6440 S. Claiborne, New Orleans, La.
Miss Patricia Ryan, 271 Citrus Rd., New Orleans, La.
Mr. Ben A. Douglas, 7110 Hampson St., New Orleans, La.
Mr. Eugene P. Gauthreaux, 643 Grove Ave., Harahan, La.
Mr. Oswald A. Decuir, 7301 Plum St., New Orleans, La.
Mr. Hubert E. Ellzey, Jr., 3113 Cleary, Metairie, La.
Mr. Philip J. LaGrange, 10714 Curran Blvd., New Orleans, La.
Mr. Harold W. O'Brien, Jr., Fontainebleau Dr., New Orleans, La.
Mr. David J. Potter, Box 908 31 McAlister Dr., New Orleans, La.
Mr. Rohmer B. Beard, P.O. Box 445, Blanchard, La.
Mrs. Jeni Lou Ince, 610 Kirby Place, Shreveport, La.
Mrs. Bobbie Hooper Perry, 3805 Maryland, Shreveport, La.
Mr. James D. Simmons, 648 Wichita St., Shreveport, La.
Mrs. Mary Joyce Simmons, 648 Wichita St., Shreveport. La.
Mrs. Alma H. Thomas, 1447 Parker, Shreveport, La.

APPENDIX C

Louisiana State University
College of Agriculture
Department of Agricultural Education
Baton Rouge, Louisiana

Interviewer______________
Date of Interview___________

CONFIDENTIAL

Pre-Employment and Continuing Educational Needs of Persons Engaged in Off-The-Farm Agricultural Occupations in Selected Areas of Louisiana

Form I

I. Business or Service (Business Code__________) (Firm Number__________)

A. Name of Business or Service______________________________

Address___________________________Parish__________________

B. Person Interviewed____

Position____

C. Estimated per cent gross income that is agriculturally oriented____

D. Major agricultural products and/or functions of business or service

____

____

II. Employees in this Business or Service -- (Total Number)______________

A. For employees needing competencies in agriculture, complete the following:

		Number of Employees		
	Existing Job Titles	Full-Time	Part-Time	Five Years
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				

Form I (Cont'd)

	Anticipated New Job Titles	Full-Time	Part-Time	Five Years
1.				
2.				

Fill out a separate Form 2 for each job title listed above.

Louisiana State University
College of Agriculture
Department of Agricultural Education
Baton Rouge, Louisiana

Interviewer____________

Date of Interview________

CONFIDENTIAL

Pre-Employment and Continuing Educational Needs of Persons Engaged in Off-The-Farm Agricultural Occupations in Selected Areas of Louisiana

Form II

I. Name and Address of Firm______________________________

____

II. Job Title______________________________

III. Number of workers in this job title______________________

Full-time________ Part-time________

Average Age________ Min. for Entry____ Max. for Entry________

IV. Wage or Salary per Month: (Beginning - Maximum - Present)

____	150 - 200	____	301 - 350	____	451 - 500	____	601 - 650
____	201 - 250	____	351 - 400	____	501 - 550	____	651 - 700
____	251 - 300	____	401 - 450	____	551 - 600	____	700 and above.

V. Activities and Duties of Persons with this Job Title________________

____

____

____

____

VI. Agricultural Areas with which Worker must be Familiar to do Job:

Animal Science

Necessary	Desirable	Not Necessary	
________	________	________	1. Breeding Farm Animals
________	________	________	2. Livestock Feeding and Nutrition
________	________	________	3. Sanitation, Disease and Parasite Control

VI. Agricultural Areas with which Worker must be Familiar to do Job: (Cont'd.)

Animal Science (Cont'd.)

Necessary	Desirable	Not Necessary	
______	______	______	4. Housing and Equipment
______	______	______	5. Management
______	______	______	6. The Dairy Manufacturing Industry
______	______	______	7. Processing
			______ Packing Plants ______ Creameries ______ Poultry Processing ______ Butchering
______	______	______	8. Marketing
			______ Packing Plants ______ Creameries ______ Poultry Processing Plants ______ Livestock Auctions

Plant Science

Necessary	Desirable	Not Necessary	
______	______	______	1. Propagation
______	______	______	2. Soils and Fertilization
______	______	______	3. Control of insects_____diseases_____ weeds_____
______	______	______	4. Management
______	______	______	5. Production of Ornamental Plants
______	______	______	6. Landscaping
______	______	______	7. Ginning
______	______	______	8. Warehousing
______	______	______	9. Processing (food, seed, grain, etc.)
______	______	______	10. Marketing
______	______	______	11. Forestry
			______ Establishing a Stand ______ Hardwood Control ______ Fire Control

VI. Agricultural Areas with which Worker must be Familiar to do Job: (Cont'd.)

Plant Science (Cont'd.)

_____ Estimating and Grading
_____ Disease Control
_____ Insect Control
_____ Harvesting
_____ Marketing
_____ Manufacturing
_____ Pulp Wood

Agricultural Business Management and Marketing

Necessary	Desirable	Not Necessary	
			1. Records and Accounts, Budgeting and Analysis
			2. Agricultural Financing, Credit and Insurance
			3. Farm Organization and Management
			4. Labor Management
			5. Marketing Problems and Practices
			6. Agricultural Policy
			7. Agricultural and Related Price Analysis
			8. Cooperatives and Business Organizations

Agricultural Mechanics and Automation

			1. Farm Power and Machinery
			2. Farm Buildings and Conveniences
			3. Farm Electrification and Processing
			4. Soil and Water Conservation
			5. Farm Shop (Welding, Plumbing, etc.)
			6. Farm Construction and Maintenance

List other agricultural competencies that are needed for this job title

____

____

____

VII. Education Level Desired for Job Titles (Check only one)

_____ 1. Less than High School Graduate

_____ 2. High School Graduate

_____ 3. Post High School Technical Education

_____ 4. Some College

_____ 5. College Degree

_____Baccalaureate _____Master's _____Doctorate

_____ 6. No Preference

VIII. Residential Background (Check only one)

1. Farm_____ 2. Rural, Nonfarm_____ 3. Urban_____ 4. No Preference_____

IX. Farm Experience

_____ 1. On a commercial farm

_____ 2. On a noncommercial farm

_____ 3. No Preference

X. Experience Desired to Enter this Job Title____________________

____

____

XI. Limitations on Entering this Job Title

A. Licensing or Certification

_____ 1. Professional

_____ 2. Industrial

_____ 3. Civil Service

_____ 4. Other (specify) ____________________________

____

B. Labor Law Restrictions ____________________________

____

C. Labor Union Restrictions ____________________________

____

XI. Limitations on Entering this Job Title (Cont'd.)

D. Other (specify) ____

____

XII. Education Required to Advance in this Job Title

A. Technical short course or training provided by:

_____ 1. Your firm or the industry as a whole

_____ 2. On-the-job training

_____ 3. Public school (adult education)

_____ 4. A vocational school

_____ 5. An agricultural college

_____ 6. None

APPENDIX D

STATE SUMMARY--JOB TITLES

I. FARM MACHINERY SALES AND SERVICE

Professional

Irrigation Engineer	1	Asst. Irrigation Engineer	1

Technical

Managerial

General Manager	13	Asst. Manager	5
Sales Manager	4	President	8
Business Manager	1	Asst. Parts Manager	2
Parts Manager	19	Vice-President	1
Service Manager	8	Truck Manager	1
Manager	25	Shop Manager	1
Office Manager	4	Used Car Manager	1
Asst. General Manager	1	Credit Manager	1

Supervisory

Shop Foreman	14	Parts Foreman	1

Sales

Salesman	99	Parts Salesman	3
Sales Clerk	2	Manufacturer's Agent	1
Truck Salesman	8	Farm Equip. Salesman	5

Office

Clerk	2	Posting Clerk	1
Bookkeeper	6	Office Secretary	2

Skilled

Mechanic	132	Parts Man	1
Truck Mechanic	4	Farm Equip. Mechanic	3
Serviceman	4	Welder	1
Tractor & Machine Mechanic	2		

Semi-Skilled

Truck Driver	3	Assemblyman	16
Mechanic Helper	11	Shop Worker	3
Warehouseman	4		

Unskilled

Porter	2

II. FARM SUPPLIES AND EQUIPMENT

Professional

Plant Breeder	1	Forester	1
Engineer	1	Agronomist	2
Horticulturist	1	Nutritionist	1

Technical

Seed Analyser	1	Lumber Grader	1
Herdsman	1	Pilot	5
Chemist	2		

Managerial

Manager	201	Grocery Manager	1
Store Manager	1	Asst. Manager	31
General Manager	13	Dept. Manager	1
Treasurer	1	Sales Manager	16
Division Manager	3	Farm Store Manager	1
Plumbing & Weld. Dept. Mgr.	1	Parts Manager	1
Asst. Parts Manager	1	Manager Farm Dept.	3
Personnel Manager	1	Office Manager	7
Branch Manager	6	Produce Manager	1
Manager Trim Dept.	1	Market Manager	1
President	17	Vice-President	8
Secretary-Treasurer	3	Treasurer	1
Production Manager	2	Warehouse Manager	4
Plant Dept. Manager	1	Traffic Manager	2
Division Manager	1	Shop Manager	1
Service Manager	1	Dept. Manager	14
Plant Manager	7	District Manager	1
Manager-Owner	5	Horticulture Dept. Manager	1

Supervisory

Fertilizer Supt.	1	Asst. Plant Supt.	1
Mill Foreman	4	Woods Foreman	2
Dept. Supervisor	1	Superintendent	2
Foreman, Supt.	1	Plant Supervisor	1
Warehouse Supervisor	1	Seed-Dryer Supervisor	1
Yard Supt.	1	Yard Foreman	1
Mill Supt.	3	Foreman	4
Warehouse Supt.	1	Wrecking Foreman	1
Shop Foreman	1	Planner Foreman	1
Erection Foreman	1	General Foreman	1

Sales

Salesman	330	Sales Correspondent	1
Sales Clerk	10	Inside Salesman	2
Sales Lady	2	Buyer	2
Sales Girls	7	Livestock Sales Consultant	1
Outside Salesman	13	Farm Pharmaceutical Buyer	1
Telephone Salesman	2	Lumber Buyer	1
Farm Store Salesman	5	Agricultural Salesman	1
Purchasing Agent	3	Counterman	5

Office

Bookkeeper	20	Secretary	9
Chief Accountant	2	Clerk	44
Shipping Clerk	24	General Clerk	3
Receiving Clerk	1	Accountant	2
Secretary-Treasurer	2	Stock Clerk	1
Asst. Secretary	1	Cashier	10
Office Employees	22	Office Clerk	8
Service Clerk	2		

Skilled

Mechanic	3	Estimator	2
Serviceman	1	Home Improvement Consultant	1

Operator	7	Farm Service Man	5
Saddlemaker	1	Plant Operator	1
Welder	1	Mechanic Serviceman	5
Semi-Skilled			
Produce Man	1	Poultry Service Man	1
Service Man	21	Truck Driver	74
Maintenance Man	14	Warehouseman	24
Asst. Seed-dryer	1	Assembly man	1
Semi-skilled producers	25	Deluxer	1
Repairman	4		
Unskilled			
Porter	4	Fence Erector	33
Yardman	12	Insulation Man	3
Laborers	85	Delivery Man	11
Warehouse Asst.	1	Driver's Helper	1
Truck Helper	4	Plant Helper	1
III. LIVESTOCK AND POULTRY			
Professional			
Bacteriologist	2	Hog Specialist	1
Technical			
Field Man	14	Herdsman	5
Inspector Grader	4	Cattle Buyer	2
Swine Expert	1	U.S.D.A. Inspector	1
Lab. Technician	16	Auctioneer	3
Lab. Sample Checker	1	Plant Engineer	2
Managerial			
Plant Manager	10	Sales Manager	30
President	12	Vice-President	4
Manager	127	Office Manager	11
Asst. Manager	17	General Manager	14
Egg Dept. Manager	1	Southern Zone Manager	1
Killing Floor Manager	1	Asst. Office Manager	1
Owner Manager	2	Egg Room Manager	1
Beef Manager	1	Dairy & Poultry Manager	1
Asst. General Manager	1	Personnel Manager	2
Retail Sales Manager	1	Wholesale Manager	1
Branch Manager	1	Merchandise Manager	1
Treasurer	1	Secretary-Treasurer	5
Procurement Manager	1	Production Manager	6
Asst. Plant Manager	1	Farm Manager	3
Milk Production Manager	1	Marketing Manager	1
Supervisory			
General Plant Supt.	5	Plant Production Supt.	1
Plant Supervisor	3	Manufacturing Supervisor	2
Supervisor	2	Route Supervisor	11
Sales Supervisor	3	Ice Cream Plant Supt.	1
Milk Plant Supt.	1	Milk Supervisor	1
Sausage Supt.	3	Ice Cream Supt.	3
Dairy Manufacturing Supt.	1	Poultry Supervisor	2

Shipping Foreman	3	Curing Foreman	1
Plant Foreman	4	Meat Curing Supervisor	1
General Supervisor	5	Asst. Ice Cream Supt.	1
Foreman	9	Milk Supt.	1
Shift Supervisor	2	Asst. Milk Supt.	1
Processing Foreman	1	Superintendent	3
Quality Control Supervisor	1	Dock Foreman	1
Sales Supervisor	1	Storeroom Supt.	1
Prod. Control Supervisor	1	Sausage Foreman	6
Dairy & Poultry Supt.	1	Meat Supt.	1
Plant Supt.	21	Retail Supt.	7
Wholesale Supt.	3	Sales Supt.	1
Asst. Plant Supt.	6	Asst. to Sales Supt.	1
Supervisor	8	Asst. Supervisor	2
Dept. Supervisor	14	Yard Foreman	2

Sales

Salesman	202	Routeman	44
Route Salesman	17	Buyer	14
Purchasing Agent	3	Sales Engineer	2
Sales Lady	2	Outside Salesman	1
Beef,Lamb & Veal Salesman	1	Precision Cut Salesman	1
Dairy & Poultry Salesman	1	Full Line Salesman	3
Sales Clerk	1	Merchandiser	1
Livestock Buyer	1	Cattle Buyer	4
Merchandising Man	1	Hotel, Restaurant & Inst. Salesman	1

Office

Bookkeeper	8	Cashier	2
Shipping Clerk	14	Clerical Clerk	8
Office Worker	6	Clerk	4
Ticket Writer	4	Weightmaster	2
Secretary	1	Stock Clerk	2
Auditor	1	Accountant	4
Receiving Clerk	4	Scale Man	1
Clerical Help	5	- - -	

Skilled

Meat Cutter	52	Butcher	69
Asst. Herdsman	1	Pasteurizer Operator	3
Rendering Operator	2	Steak Cutter	1
Meat Boner	5	Bone Cutter	40
Livestock Handler	8	Grader Packer	4
Stockman	16	Processor (Poultry)	24
Processor (Beef)	2	Smoker	4
Carpenter	1	Auctioneer	2
Ice Cream Maker	1	Operator	1
Asst. Operator	1	Cheese Maker	4
Milk Tester	3		

Semi-Skilled

Maintenance Man	5	Truck Driver	74
Milker	2	Order Packer	8
Cooler Man	4	Grader	1

Warehouseman	23	Candler & Grader	4
Plant Workers	3	Weight Master	1
Ring Man	3	Sales Driver	23
Sausage Maker	33	Weight Man	1
Butcher's Helper	5	Load-Out-Man	1
Poultry Processors	2	Egg Candler	22
Curer	3	Service Man	1
Slaughterer	1	Mixers Man	4
Processor	37	Laborer	71
Yardman	14	Groundsman	3
Slaughterer,Packer & Peeler	3	Delivery Man	1

IV. CROPS, FORESTRY, & SOIL CONSERVATION

Professional

State Forester	1	Asst. State Forester	1
Forester V	3	Forester IV	6
Forester III	8	Forester II	21
Forester I	3	Timber Mgmt. Researcher	54
Water Mgmt. Researcher	8	Wildlife Researcher	5
Biochemist	3	Agronomist	6
Director of Research	1	Pathologist	13
Service Forester	1	Public Relations	1
Range Researcher	11	Engineer	1
Asst. Engineer	1	Chemist	1
Asst. Forester	1	Work Unit Conservationist	1
Dept. Information Rep.	2	Tropical Research Director	2
Federal Inspector	1	Area Forest Supt.	2
District Forest Supt.	1	Unit Forester	1
District Ranger	1	Agri-Commodity Supervisor	1
Research Forester	11	Range Conservationist	8
Soil Scientist	7	Asst. District Forester	1
Entomologist	15	District Forester	1
Plant Physiologist	1	Forester	19

Technical

Electrican	5	Technical Expert	1
Investigator III	1	Investigator II	5
Car Inspector	1	Engineer	2
Asst. Engineer	4	Chemist	4
Forest Technician	1	Treating Technician	2
Forest Ranger	16	Graders	1
Candlers	3	Tree Surgeon	10
Inspector	1	Enforcement Agent	1
Radio Technician	1	Lumber Inspector	8

Managerial

Manager Agri. Dept.	1	General Field Manager	1
General Sugar Mill Manager	1	Manager	137
Asst. Manager	37	Traffic Manager	4
Elevator Manager	1	Executive Vice-President	1
Secretary-Treasurer	2	Office Manager	28
President	9	Vice-President	4
Field Manager	2	Store Manager	2
Business Manager	1	General Manager	6
Production Manager	2	Plant Manager	2

Gin Manager	8	Poultry Manager	1
Egg Farm Manager	1	Sales Manager	11
Meat Manager	10	Produce Manager	13
Forestry Manager	1	Market Manager	5
Land Manager	1	Export Manager	1
Transportation Manager	1	Banana Dept. Manager	1
Truck Manager	1	Egg Room Manager	1

Supervisory

Foreman	25	Foreman II	3
Foreman III	2	Supervisor	2
Fabrication Supt.	2	Superintendent	3
Asst. Superintendent	4	Production Plant Supt.	1
Erection Foreman	1	General Shipping Supervisor	1
Supt. Oil Mill	1	Plant Foreman	1
Plant Supervisor	1	Farm Supt.	12
Quality Control Supt.	1	Wood Procurement Supt.	1
Wood Marketing Foreman	1	Warehouse Supt.	1
Warehouse Foreman	3	Foreman Lint Room	1
Tree Surgeon Foreman	2	Herdsman Foreman	1
Head Forestry Dept.	1	Field Overseer	4
Supervisor Warehouse	1	Supervisor Transportation	1
Tree Nursery Supt. I	2	Tree Nursery Supt. II	1
Wood Yard Foreman	1	Gin Supt.	1
Mill Supt.	2	Plant Supt.	2
Maintenance Foreman	1	Repair Shop Foreman	1
General Supt. of Mills	1	Elevation Supt.	1
Yard Foreman	1		

Sales

Salesman	84	Merchant	12
Buyer	19	Seed Buyer	5
Sales Rep.	1	Dairy Clerk	1
Food Clerk	10	Sales Clerk	4
Broker	1	Produce Buyer	1
Trader	16		

Office

Time Keeper	1	Cane Weigher	4
Clerks	12	Payroll Clerk	1
Chief Clerk	1	Office Worker	13
Seed Checker & Weigher	1	Secretary	8
Shipping Clerk	10	Bookkeeper	24
Secretary-Treasurer	1	Office & Shipping Clerk	4
Cashier	1	Weigher	8
Typist-Clerk	2		

Skilled

Cavity Man	1	Refinery Mechanic	3
Derrick Operator	4	Clarifier Operator	3
Sugar Boiler	6	Mechanic	16
Forest Ranger I	7	Gin Operator	6
Forest Ranger II	18	Standman	8
Forest Ranger III	6	Forest Foreman	8
Cabinet Maker	1	Radio Operator	1

Heavy Equipment Operator	3	Fill Operator	1
Egg Candler	6	Carpenter	1
Forest Ranger	3	Welder	1
Partsman	1	Lookout Man	7
Ginner	11	Ranger	1
Press Operator	1	Electrician	2
Meat Cutter	39	Horse Trainer	1
Butcher	2	Presser	2
Draftsman	3	Edgeman	1
Trimmer	1		

Semi-Skilled

Climber	16	Truck Driver	51
Forest Foreman I	108	Forest Towerman I	67
Forest Foreman II	103	Forest Towerman II	33
Forest Foreman III	114	Fire Guard	7
Tractor Operator	4	Packer-Shipper	2
Forest Fireman	57	Forest Towerman	18
Maintenance Helper	5	Tree Trimmer	8
Poultry Processor	15	Feed Miller	1
Lift Truck Operator	1	Crawler Driver	1
Log Scaler	1	Asst. Ginner	2
Welder Helper	1	Warehouseman	5
Mill Employees	25	Tower Man II	1
Gin Stand Worker	2	Weigher	2
Candler	3	Pumper	2
Horse Training Helper	5		

Unskilled

Groundsman	2	Laborer	415
Woods Crew	3	Trade Helper	1
Yardman	2	Porter	7
Warehouseman	38	Field Workers	70
Block Setter	2	Yard Laborer	1

V. ORNAMENTAL HORTICULTURE

Professional

Landscape Architect	13	Entomologist	2
Landscape Draftsman	1	Landscape Specialist	3

Technical

Florist	1		

Managerial

Manager	105	Asst. Manager	32
Nursery Manager	1	Manager Retail Sales	1
Asst. Manager Retail Sales	1	Manager Chem. & Fert. Dept.	1
Small House Plant Manager	1	Nursery Stock & Trees Manager	1
Office Manager	2	Nursery Farm Manager	2
Sales Manager	1	Sales Lot Manager	1
President	2		

Supervisory

Foreman	4	Sales Supervisor	1
Nursery Foreman	1	Supervisor	1

Landscape Foreman	6	Greenhouse Foreman	1
Field Foreman	1	Lot & Landscape Foreman	1
Job Foreman	1	Plant Supervisor	1
Sales			
Salesman	61	Sales Clerk	4
Dispatcher	1	Landscape Salesman	4
Lot Salesman	2		
Office			
Clerk	5	Bookkeeper	3
Office Worker	2	Telephone Clerk	1
Skilled			
Floral Designer	37	Asst. Designer	5
Propagator	8	Flower Arrangers	3
Designer	19	Asst. Floral Designer	4
Mechanic	2	Tree Surgeon	1
Semi-Skilled			
Grower	9	Apprentice Designer	1
Potter	3	Nurseryman	4
Planter	1	Truck Driver	8
Grower	2	Landscape Gardener	4
Tractor Driver	1	Serviceman	2
Unskilled			
Laborer	214	Delivery Boy	12
Yard Boy	1	Gardener	79
Apprentice	1	Nursery Helper	9
Landscape Laborer	5	Yardman	1
Greenhouse Attendant	1	Potter	1
Stable Workman	3		

VI. WILDLIFE AND RECREATION

Professional			
Curator	3	Biologist	1
Horticulturist	1	Commissioner	1
Technical			
Managerial			
Manager	7	Superintendent	1
Asst. Superintendent	1	Park Supt.	11
Asst. Manager	2	Golf Course Manager	1
General Manager	2		
Supervisory			
Park Ranger	9	Area Supervisor	5
Superintendent	8	Foreman	1
Asst. Superintendent	1	Green Supt.	1
Tree Supervisor	2	Landscape Supervisor	2
Supervisor	1	Parkway Foreman	1
Golf Course Supt.	1	Recreation Area Supervisor	2

Sales

Office

Skilled

Taxidermist	2	Chief Greenskeeper	2
Operator	2	Mechanic	1

Semi-Skilled

Maintenance Man	12	Truck Driver	2
Greenskeeper	11	Asst. Greenskeeper	1
Gardener	7		

Unskilled

Park Attendant	49	Kennel Man	10
Groundskeeper	72	Golf Course Employee	5
Fairway Keeper	2	Laborers	54
Asst. Greenskeeper	1	Caretakers	2

VII. FARM SERVICE

Professional

Mechanical Engineer	6	Research Director	1
Chemist Bacteriologist	1	County Supervisor	3
Public Relations	2	Home Service Advisor	1
Farm News Director	1	Executive Secretary	1
FHA Supervisor	1	Work Unit Supervisor	1
Agri. Engineer	5	Entomologist	3
State Director	1	Administration Officer	1
Engineer	1	Loan Specialist	1
Asst. Loan Specialist	1	Farm Management Officer	2
Home Economist	1	Loan Officer	1
Radio Farm Director	2	Supervisor	1
Farm Management Supervisor	1	Agri. Advisor	1
Field Engineer	1		

Technical

Laboratory Asst.	1	Livestock Board Inspector	20
Service Technician	17	Airplane Pilot	2
Pest Control Technician	3	Artificial Inseminator	1
Management Technician	1	Plant Cover Technician	1
Milk Technician	1	Breeding Technician	1
Inspector	1	Pilot	16

Managerial

Manager	136	President	8
Asst. Manager	8	Division Manager	1
Sales Manager	12	General Manager	10
Branch Manager	1	District Manager	3
Vice-President	3	Office Manager	10
Senior Vice-President	2	Termite Division Manager	1
Pest Control Div. Manager	1	Regional Manager	6
Secretary-Treasurer	1		

Supervisory

Supervisor	6	Line Supt.	1

Shop Foreman	3	District Supervisor	4
Pest Control Supervisor	2	Termite Supervisor	1
Machinist Foreman	2	Service Supervisor	2
Foreman	5	Performance Supervisor	1
Termite Dept. Head	1	Irrigation Supervisor	2
Field Supt.	1	Asst. Shop Foreman	1
Business Supervisor	5	Plant Supervisor	2
Installation Supervisor	1	Spray Supervisor	1

Sales

Salesman	81	Routeman	3
Real Estate Agent	1	Insurance Salesman	4
Advertising Salesman	2		

Office

Office Worker	3	Secretary	7
Chief Brand Clerk	1	Bookkeeper	4
Office Clerk	16	Clerk	11
Office Asst.	1		

Skilled

Operators	2	Carpenter	9
Mechanic	18	Lineman	18
General Pest Treater	2	Machine Operator	10
Machinist	18	Welder	51
Well Serviceman	3	Well Driller	2
Welding Operator	1	Driller	9
Truck Press Operator	1	Tree Surgeon	5
Blacksmith	1	Reporters	16
Serviceman	26		

Semi-Skilled

Treater	6	Treater Helper	1
Pest Control Service Man	102	Exterminator	4
Termite Service Man	7	Warehouseman	3
Welder Helper	6	Scout II	1
Well Driller Helper	3	Painter	4
Machinist Helper	6	Ground Crew	3
Termite Treater	6	Asst. Exterminator	2
Fieldman	1	Apprentice Machinist	2
Tool Room Man	1	Termite Control Man	7
Treater	1	Tree Climber	6

Unskilled

Warehouse Helper	2	Lineman Helper	15
Delivery Man	1	General Helper	4
Laborer	10		

VIII. AGRICULTURAL SERVICE

Professional

Research Agronomist	1	Asst. Agronomist	1
Voc. Agri. Teacher	16	County Office Manager	1
Voc. Agri. Specialist	3	Voc. Agri. Supervisor	5
Executive Asst. II	1	Land Administrator II	2
Chief Anhydrous Ammonia Div.	1	Asst. Commissioner of Agri.	1

Dir. Weights & Measures	1	Asst. Dir. Weights & Measures	1
Exec. Asst. Dept.of Agri.	1	Dir. Sweet Potatoe Adver.	1
Dir. Warehouse Comm.	1	Plant Entomologist	1
Veterinarian	86	State Entomologist	1
Poultry Pathologist	3	Veterinary Pathologist	3
Pest Control Dist. Super.	1	Pest Control State Super.	1
State Super. La. Market Comm.	1	County Agent	8
Asst. County Agent	6	Assoc. County Agent	2
Agri. Marketing Ser. Area Supervisor	1	Agri. Marketing District Supervisor	1
Agri. Commodity Graders	9	State Dir. Voc.Agri. Ed.	1
Chairman Agri. Dept.	1	Professor of Agronomy	1
Assoc.Prof. Ag. Engineering	1	Assoc. Prof. Animal Science	1
Dir. Agri. Research Service	1	Asst. Dir. Agri. Research Ser.	4
Chemical Engineer	15	Plant Pathologist	10
Research Forester	100	Soil Scientist	17
Forester	7	County Manager	1
Party Leader	1	Agri. Economist	1
Hydralic Engineer	2	Geologist	1
Entomologist	12	Senior Counselor	1
Counselor	8	Instructor	2
Research Plant Pathologist	1	Chemist	16
Home Demonstration Agent	5	Asst. Home Demonstration Agent	6
Agronomist	3	Animal Husbandryman	1
Livestock Director	1	Conservationist	2
Home Economic Teacher	3	Assoc. Home Dem. Agent	1
Asst. Prof. of Horticulture	1	Prof. of Horticulture	1
Assoc. Prof. of Horticulture	1	Assoc. Prof. Dairy Science	1
Asst. Prof. Poultry Science	1	Forestry Consultant	2
State Admin. Officer	1	Soil Conservationist	10
Agri. Engineer	1	Civil Engineer	7
Biologist	1		

Technical

Pest Control Technician	59	Produce Inspector	178
Veterinary Nurse	1	Animal Disease Enforc. Off.	1
Livestock Insp.,General	8	Livestock Inspector	59
Sweet Potatoe Insp.	91	Apiary Insp.	4
Milk Sampler & Weigher	31	Warehouse Examiner	4
Marketing Specialist	10	Weight & Measure Insp.	19
Anhydrous Ammonia Insp.	1	Feed & Fert. Insp.	8
Herbicide Insp.	1	Seed Technician	6
Jr.Livestock Loan Field Rep.	3	Grain Insp.	3
Cotton Gin Specialist	1	State Seed Analysis	1
Exhibit Technician	1	Pest Controller	1
Soil Conser. Technician	1	Soil Conser. Aide	1
Cotton Market Specialist	6	Fats & Oil Specialist	1
Warehouse Examiner	14	Claim Specialist	2
Field Rep.	12	Credit Examiner	1
Jr. Credit Examiner	1	Inspector	143
Poultry Product Insp.	10	Poultry Grader	5
Fresh Fruit & Veg. Insp.	3	Horticultural Insp.	2
Pest Control Insp.	5	Pink Boll Worm Insp.	9
Draftsman	1	Conservation Technician	1
Civil Engineer Technician	2	Agri. Research Technician	1

Milk Technician	1	Pink Boll Worm Quar. Insp.	19
Employment Security Tech.	2		

Managerial

Manager	3	Asst. Vice-President	14
Trust Officer	1	Administration Officer	3
President	14	Vice-President	50
Loan Officer	1	Manager Livestock Loan Dept.	1
Asst. Manager Livestock Loan Dept.	1	Manager Agri. Loans	3
Manager	9	Asst. Administration Officer	1
Office Manager	2	County Office Manager	1
Secretary-Treasurer	1	Dept. Manager	1
Senior Officer	4	Storage Management Officer	2
Administrator	1	Officer in Charge	2
Senior Vice-President	1	Business Analysis	5

Supervisory

Work Unit Supervisor	14	Poultry Production Super.	1
Fire Ant Supervisor	1	Supervisor	3
Farm Superintendent II	2	Employment Security Super.	1
Area Supervisor	1	Performance Supervisor	2
Field Supt.	1	Farm Supervisor	3
Gulf Region Supervisor	1	Horticulture Supervisor	1
Horticulture Foreman	2		

Sales

Liason Officer	1	Market & Produce Buyer	2
Salesman	3	Merchants	3

Office

Secretary	10	Clerk	50
Clerk Typist	3	Asst. Cashier	15
Note Teller	16	Auditor	1
Milk Plant Auditor	18	Chief Clerk	3
Program Clerk	4	Interviewer	2
Collector	2	Farm Commodity Market Reporter	17
Area Clerk	1	Stenographer	9
Investigator	1	Conservation Program Clerk	1
Allotment Program Clerk	1	Soil Bank Clerk	1
Counter Clerk	2	Bookkeeper	1
Administrative Clerk	1	County Office Clerk	1
Receptionist	3	Cashier	4
Sugar Feed Grain Clerk	1	Agri. Conser. Program Clerk	1
Acreage Allotment Clerk	1	Admin. Price Support Clerk	1
Grain Market Reporter	1	Clerk IV	1
Milk Auditor	8	Agri. Statistician	1
Credit Examiner	3	Appraisers	8

Skilled

Auto Mechanic	1	Surveyor	4
Plainometer Operator	3	Field Reporter	3

Semi-Skilled

Veterinarian Helper	3	Kennel Helper	2

Plant Pest Control Worker	1	Fire Ant Control Worker	3
Veterinarian Asst.	1	Grader	15
Unskilled			
Laborer	38	Veterinarian Hosp. Helper	25
Gardener	1	Grain Sampler	1
Kennel Man	5		